



2015 WATER AND WASTEWATER
UTILITY RATE STUDY AND
LONG-TERM FINANCIAL PLAN

CITY OF GOODYEAR, ARIZONA

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Prepared by:



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**CITY OF GOODYEAR, ARIZONA
WATER and WASTEWATER
UTILITY COST OF SERVICE RATE AND FEE STUDY
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Acknowledgements

During the course of this rate study, several City employees expended considerable time and effort in assisting the project team. These employees included the Mayor and Council, Mr. Brian Dalke, Mr. Bob Beckley, Mr. Larry Lange, Ms. Anna Dizack, Mr. Mark Holmes, Mr. Mark Seamans, Mr. Johnn Gaio, Ms. Lauri Wingenroth, Mr. Mario Saldamando and members of the City's Water Planning Committee. The project team owes a debt of gratitude to the hard work, dedication and professionalism of these individuals, without whom this project would not have been successfully completed.

The project team has relied upon the extensive data supplied by the City. Thus, the integrity of the study is largely dependent upon the accuracy of this financial and volumetric data. Every effort has been made by the project team to validate and confirm the information contained herein prior to the preparation of the final study documents. This report presents no assurance or guarantee that the forecast contained herein will be consistent with actual results or performances. These represent forecasts based on a series of assumptions about future behavior, and are not guarantees. Any changes in assumptions or actual events may result in significant revisions to the forecast and its conclusions. The cash flow projections and debt service coverage calculations are not intended to present overall financial positions, results of operations, and/or cash flows for the periods indicated, which is in conformity with guidelines for presentation of a forecast established by the American Institute of Certified Public Accountants.

Executive Summary

Executive Summary

Background



months while the City's engineering consultants completed their draft of the new Water Master Plan. In early 2015 the study resumed. This next phase of the study included the analysis and incorporation of the revised Capital Improvement Plan ("CIP") developed in conjunction with the Water Master Plan and the development of a comprehensive rate plan for Fiscal Year ("FY") 2016 and beyond.

The City identified numerous objectives for this study, including but not limited to the following:

- A comprehensive analysis and evaluation of the water and wastewater systems' current cost of service and revenue requirements
- An estimate of current and forecast accounts, volumes and billing units for the ten year forecast period
- An assessment and evaluation of the known and potential changes occurring within the City's utility systems including but not limited to CAP water costs and supplemental capital projects
- A forecast of operating expenses over the next decade, taking into consideration such factors as inflation, system growth, and increases in staffing levels
- A thorough review of the water and wastewater systems' known capital improvement needs, as well as a determination of the need for funding capital requirements through the issuance of long-term debt
- The development of a rate structure that would recover the City's cost of service, ensure equitable, just and reasonable treatment of identified customer classes, and maintain critical financial ratios
- A review of the City's Non-Rate Fees and Services Revenue and recommendations for updates

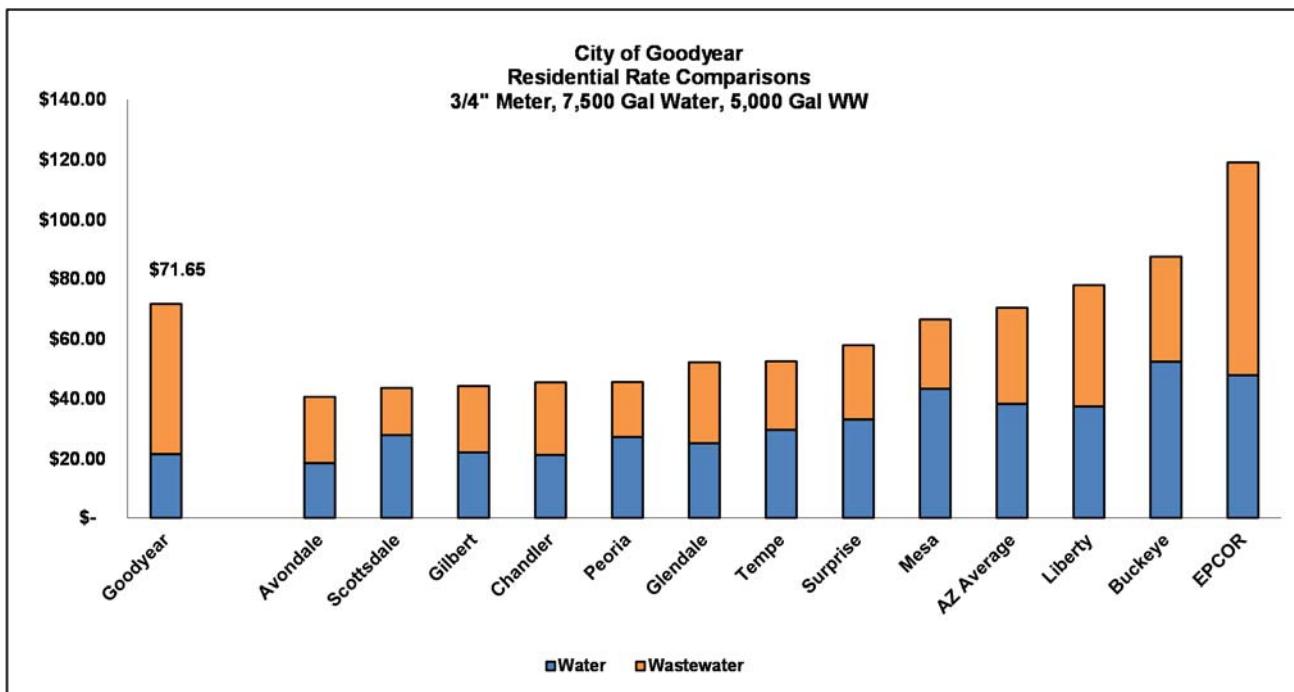
In conjunction with City staff, the project team evaluated numerous alternative scenarios and rate structures, each of which would enable the City to achieve these objectives while continuing to provide ratepayers with superior quality water and wastewater service. After a series of meetings with City staff, the Water Planning Committee and the City Council, the project team narrowed its recommendations to the alternative water and wastewater rate designs contained in this study. The analysis and recommendations presented in this study achieve all of the objectives outlined above.

Water and Wastewater Rate Comparison

Chart ES-1 graphically compares the City's monthly charges for an average household's usage of 7,500 gallons of water service and 5,000 gallons of wastewater service to those of other nearby providers in the Phoenix area. Volumes of 7,500 gallons water and 5,000 gallons wastewater were used for the comparison as they represent typical usage levels for an average household in Arizona. The rate data is based on published rates and ordinances posted by each municipality or provider in their rate ordinance or reported on their website.

The rate data is based on published rates and ordinances posted by each municipality or provider in their rate ordinance or reported on their website. These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges. The City's residential rates for average household usage of 7,500 gallons of water service and 5,000 gallons of wastewater service are very comparable to the Arizona average.

TABLE ES-1



Water and Wastewater Customers and Meters – Test Year & Ten Year Forecast

Table ES-2 presents historical and forecast total water and wastewater accounts and classifications, as well as historical and forecast water volumes for the City for the next decade. It is important to note that account growth for the City will not be comparable to total population growth, since the City is not the sole provider of water service within its total area. The project team considers these projections to be highly conservative, as circumstances such as a strong resurgence in development driven by a strengthening of the economy could substantially increase these projections.

It must be stressed that if the City does not connect these projected new connections, financial and rate plan assumptions will have to be substantially modified.

TABLE ES-2

CITY OF GOODYEAR												
HISTORICAL AND FORECAST TOTAL ACCOUNTS AND VOLUMES WATER Customer Classes												
Residential-City	Residential-County	Multi-Family	Commercial	Church	Industrial	Hydrant	Institutional	Schools	Irrigation	Reclaimed	Total	
WATER Total Accounts												
Dec-13	15,042	88	36	303	17	39	9	19	25	407	-	15,985
Dec-14	15,363	88	36	328	18	41	12	21	26	403	-	16,336
TY 2016	15,709	88	36	345	19	42	13	22	27	403	-	16,704
2025	20,826	114	47	545	26	56	18	30	36	523	-	22,221
WATER Historical Volume												
FY 2012	1,408,774,000	4,278,701	45,744,000	226,511,000	8,109,000	68,202,000	590,000	19,062,000	20,474,000	710,510,000	-	2,512,254,701
FY 2013	1,379,089,000	11,682,390	41,922,000	210,316,000	6,992,000	81,186,000	4,354,000	14,615,000	18,770,000	667,857,838	-	2,436,784,228
FY 2014	1,407,476,000	11,648,000	37,093,000	213,710,000	7,022,000	60,425,000	16,033,000	11,467,000	19,692,000	704,066,000	-	2,488,632,000
WATER Forecast Volume												
TY 2016	1,438,776,700	11,650,782	38,569,189	217,508,642	7,568,393	69,940,189	19,840,915	10,409,330	19,719,204	686,087,724	-	2,520,071,068
2025	1,888,473,532	14,955,786	49,510,202	340,247,111	10,226,671	91,917,913	27,428,406	13,969,540	26,250,516	880,711,847	-	3,343,691,525
WASTEWATER Customer Classes												
Residential-City	Residential-County	Multi-Family	Commercial	Church	Industrial	Effluent	Institutional	School	Perryville Prison	Total		
WASTEWATER Total Accounts												
Dec-13	14,553	4	36	275	17	27	-	17	23	7	-	14,959
Dec-14	14,969	4	36	269	17	26	-	16	25	8	-	15,370
TY 2016	15,397	4	36	280	18	27	-	17	27	8	-	15,814
2025	20,535	5	47	438	25	36	-	23	38	10	-	21,157

Debt Service and Capital Improvement Plan

A key factor in the development of the City's long term water and wastewater rate plan is the amount of existing and forecast debt needed to fund capital projects not funded through development fees or other sources such as private sector development agreement financing or grants.

The City has seven current water and wastewater debt obligations which are as follows:

- 1991 Water and Wastewater Revenue Refinancing - issued for water lines and wastewater treatment plant improvements, and to refund all of the Series 1993 and 1994 bonds.
- 2002 Water Infrastructure Finance Authority ("WIFA") bond – initially a \$12,399,551 water and wastewater obligation; this will be retired in FY 2021.
- 2009 Water Infrastructure Finance Authority ("WIFA") – an \$8,000,000 bond for wastewater treatment plant improvements, issued at 2% interest, on which principal and interest payments are due annually.
- 2009 Water and Sewer Refunding Bonds – refunded with a remaining principal of \$325,000 on which interest only is payable until 2049.
- 2010 Water Revenue Bond – initially issued for \$14,950,000 with a 17 year term at 5.6% interest; currently interest only is payable until 2022.
- 2011 Water and Wastewater Revenue Bond - initially issued for \$15,480,000 with a 20 year term at 5.4%; payments for principal and interest are due annually.
- General Obligation Water and Wastewater Bonds Outstanding – originally issued for \$138,085,000 of which approximately 31% was for water improvements, and 40% for wastewater improvements, and the balance for non-water or wastewater uses.

Table ES-3 presents a functional summary of the City's five year water and wastewater Capital Improvement Plan ("CIP") completed in 2015.

TABLE ES-3

CITY OF GOODYEAR		CAPITAL IMPROVEMENT PLAN	
SCENARIO:		2015 05 25 - WPC - Phase Ia	
		Total	
	WATER Capital Improvement Plan	(Millions \$)	
Water Supply		\$27.90	
Pumping		1.70	
Water Storage		4.80	
CAP Capital (Already in CIP)		1.40	
Bullard Campus Treatment Rehabilitation		0.14	
Water Main Replacements		2.90	
DMOM		<u>0.10</u>	
Total		\$38.94	
WASTEWATER Capital Improvement Plan			
Rainbow Valley WRF Improvements		\$1.30	
Corgett WRF Improvements		1.00	
Goodyear WRF Improvements		2.90	
Lift Station and Force Main Improvements		2.50	
Collection System Improvements		4.80	
City Identified Wastewater Projects		<u>5.90</u>	
Total		\$18.40	
TOTAL Capital Improvement Plan			
Total		\$57.34	

In discussions with City staff, it was determined that the City plans to issue approximately \$115 million in new debt over the ten year forecast period as presented in **Table ES-4**.

TABLE ES-4

CITY OF GOODYEAR FORECAST BOND ISSUES						
SCENARIO:		2015 05 25 - WPC - Phase In		Years Water	Years Wastewater	
	Total					
2016	\$ 14,500,000	\$ 7,000,000	\$ 7,500,000			
2017	9,000,000	9,000,000	-			
2018	17,000,000	17,000,000	-			
2019	2,000,000	2,000,000	-			
2020	5,984,364	5,984,364	-			
2021	4,500,000	-	4,500,000			
2022	5,700,000	5,700,000	-			
2023	15,000,000	-	15,000,000			
2024	41,500,000	41,500,000	-			
2025	-	-	-			
Total Bonds	115,184,364	88,184,364	27,000,000			

Table ES-5 presents the City's total existing and forecast debt service payments over the next decade.

TABLE ES-5

CITY OF GOODYEAR CURRENT AND FORECAST DEBT SERVICE									
SCENARIO:		2015 05 25 - WPC - Phase In		Water Utility			Wastewater Utility		
		Current Debt	Projected Debt	Water Total	Current Debt	Projected Debt	WW Total		
2016	\$ 5,522,593	\$ -	\$ 5,522,593	\$ 5,400,149	\$ -	\$ 5,400,149	\$ 10,922,743		
2017	5,517,720	404,811	5,922,531	5,425,230	433,726	5,858,956	11,781,486		
2018	5,523,916	925,282	6,449,198	5,157,387	433,726	5,591,113	12,040,311		
2019	5,432,039	1,908,393	7,340,432	5,331,284	433,726	5,765,010	13,105,442		
2020	5,441,618	2,024,053	7,465,671	5,457,347	433,726	5,891,073	13,356,744		
2021	4,583,798	2,370,130	6,953,928	3,823,433	433,726	4,257,159	11,211,087		
2022	4,536,660	2,370,130	6,906,790	3,187,490	693,961	3,881,451	10,788,241		
2023	4,529,301	2,699,761	7,229,063	3,184,221	693,961	3,878,182	11,107,245		
2024	4,548,247	2,699,761	7,248,009	3,199,401	1,561,413	4,760,814	12,008,822		
2025	4,547,497	5,099,711	9,647,208	3,199,401	1,561,413	4,760,814	14,408,021		

Water and Wastewater Test Year and Forecast Net Revenue Requirement

Table ES-6 presents the ten-year forecast for the City's net revenue requirement to be raised from rates under the base scenario. As the table reveals, the City's net revenue requirement is increase from \$24,461,859 in FY 2016 to \$49,879,167 in FY 2025. This represents an annual rate of growth of **8.24%**.

TABLE ES-6

SCENARIO:	CURRENT AND FORECAST REVENUE REQUIREMENT									
	Operating Expenses	Capital Outlays	CIP Funded from Rates	Current Debt Service	Future Debt Service	Transfers Out	Total Cost of Service	Less Non-Rate Revenues	Net Revenue Requirement	
TOTAL Revenue Requirement										
2016	\$ 11,880,737	\$ 2,115,722	\$ -	\$ 10,922,743	\$ -	\$ 1,900,000	\$ 26,819,202	\$ 2,357,343	\$ 24,461,859	
2017	13,466,084	2,723,124	900,000	10,942,950	838,536	1,900,000	30,770,695	1,568,746	29,201,949	
2018	15,205,713	2,855,757	1,037,500	10,681,303	1,359,007	1,900,000	33,039,280	1,615,808	31,423,472	
2019	17,196,375	3,333,679	1,176,875	10,763,323	2,342,119	1,900,000	36,712,371	1,664,282	35,048,089	
2020	19,038,706	4,035,491	1,368,219	10,988,965	2,457,779	1,900,000	39,699,160	1,714,211	37,984,949	
2021	20,722,992	5,218,722	1,411,630	8,407,231	2,803,856	1,900,000	40,464,430	1,765,637	38,698,793	
2022	22,796,986	5,254,303	1,457,211	7,724,150	3,064,091	1,900,000	42,196,741	1,818,606	40,378,135	
2023	24,628,375	5,290,952	1,505,072	7,713,522	3,393,723	1,900,000	44,431,643	1,873,164	42,558,479	
2024	26,725,802	5,328,700	1,555,325	7,747,648	4,261,174	1,900,000	47,518,650	1,929,359	45,589,290	
2025	28,582,715	5,367,580	1,608,092	7,746,898	6,661,123	1,900,000	51,866,407	1,987,240	49,879,167	

Water and Wastewater Rate Recommendations

During the course of this engagement the project team met with City staff, the Water Planning committee and the City Council to discuss numerous alternative rate scenarios and rate plans. As a result of these discussions, staff, the Water Planning Committee and the project team settled on the water and wastewater scenarios and rate designs presented in this report. These revenue requirements include all direct and indirect expenditures for operations and maintenance, capital requirements for expansion, repair and replacement, debt service and required reserves. The proposed rate plan is designed to capture sufficient revenues for these purposes as well as coverage of the basic cost of service.

Changes in any of these assumptions may require significant changes to the funding assumptions for the CIP and to the rate plan.

Alternative 1 – “Water Planning Committee Phase In”

Under Alternative 1, the City implements a series of annual water and wastewater rate adjustments over the period FY 2016 - FY 2025 to achieve cost of service rates for water and wastewater operations. The projected rate revenues collected are forecast to be sufficient to fund all operating expenses and capital obligations in each of the forecast years. This alternative assumes the following:

- Maintains the current rate design structure for both water and wastewater customer classes
- Rate adjustments are uniformly applied to both base and volume charges
- Water rate adjustments are uniformly applied to all water rate classifications
- Wastewater rate adjustments are uniformly applied to all wastewater rate classifications

Table ES-7 presents a summary of the water rate plan proposed for the City under this alternative for the next five years and Table ES-8 presents a summary of the wastewater rate plan. Table ES-9 presents examples of the impact on monthly bills. The recommended rate plan continues the City's policy of implementing water and wastewater rate changes in January of each year.

TABLE ES-7

CITY OF GOODYEAR		WATER RATES: ALTERNATIVE 1							
SCENARIO:		2015 05 25 - WPC - Phase In							
		Current	Effective Jan-16	Effective Jan-17	Effective Jan-18	Effective Jan-19	Effective Jan-20		
Base Charge -- Per Month									
3/4"		\$ 11.24	\$ 12.70	\$ 14.73	\$ 16.35	\$ 17.49	\$ 18.54		
1 "		15.54	17.56	20.37	22.61	24.19	25.64		
1 1/2"		25.12	28.39	32.93	36.55	39.11	41.46		
2"		40.67	45.96	53.31	59.17	63.31	67.11		
CAP Water Charge/1,000 Gallons									
All Usage		-	0.40	0.60	0.75	0.85	0.95		
Volume Chg/1,000 Gallons									
Residential									
-	6,000		1.30	1.47	1.71	1.90	2.03	2.15	
6,001	12,000		2.59	2.93	3.40	3.77	4.03	4.27	
12,001	30,000		3.89	4.40	5.10	5.66	6.06	6.42	
30,001	Above		6.25	7.06	8.19	9.09	9.73	10.31	
Non-Residential/School									
-	40,000	\$ 3.30	\$ 3.73	\$ 4.29	\$ 4.72	\$ 4.91	\$ 5.06		
40,001	100,000	5.28	5.97	6.87	7.56	7.86	8.10		
100,001	Above	6.86	7.75	8.91	9.80	10.19	10.50		
Irrigation									
-	80,000	4.95	5.59	6.43	7.07	7.35	7.57		
80,001	Above	5.69	6.43	7.39	8.13	8.46	8.71		
Reclaimed									
All usage per 1,000 gallons		1.65	1.86	2.14	2.35	2.44	2.51		

TABLE ES-8

CITY OF GOODYEAR		WASTEWATER RATES: ALTERNATIVE 1							
SCENARIO:		2015 05 25 - WPC - Phase In							
		Current	Effective Jan-16	Effective Jan-17	Effective Jan-18	Effective Jan-19	Effective Jan-20		
Base Charge -- Per Month									
3/4"		\$ 21.12	\$ 21.75	\$ 22.40	\$ 22.85	\$ 23.31	\$ 23.78		
1 "		32.41	33.38	34.38	35.07	35.77	36.49		
1 1/2"		39.94	41.14	42.37	43.22	44.08	44.96		
2"		77.58	79.91	82.31	83.96	85.64	87.35		
Volume Chg/1,000 Gallons									
All Classes		5.78	5.95	6.13	6.25	6.38	6.51		

TABLE ES-9

CITY OF GOODYEAR									
WATER AND WASTEWATER RESIDENTIAL RATE PLAN IMPACT: ALTERNATIVE 1									
SCENARIO:									
2015 05 25 - WPC - Phase In									
	Current	Effective Jan-16	Effective Jan-17	Effective Jan-18	Effective Jan-19	Effective Jan-20	Effective Jan-16	Effective Jan-17	Effective Jan-18
Residential -- 3/4"									
5,000 Gallons Water	\$ 17.74	\$ 22.05	\$ 26.28	\$ 29.60	\$ 31.89	\$ 34.04			
5,000 Gallons Wastewater	50.02	51.50	53.05	54.10	55.21	56.33			
Total	67.76	73.55	79.33	83.70	87.10	90.37			
Increase	5.79	5.78	4.37	3.40	3.27				
7,000 Gallons Water									
5,000 Gallons Wastewater	\$ 21.63	\$ 27.25	\$ 32.59	\$ 36.77	\$ 39.65	\$ 42.36			
Water Charge	50.02	51.50	53.05	54.10	55.21	56.33			
Total	71.65	78.75	85.64	90.87	94.86	98.69			
Increase	7.10	6.89	5.23	3.99	3.83				
* Non-Residential -- 2"									
25,000 Gallons Water	\$ 123.17	\$ 149.21	\$ 175.56	\$ 195.92	\$ 207.31	\$ 217.36			
20,000 Gallons Wastewater	193.18	198.91	204.91	208.96	213.24	217.55			
Water Charge									
Total	316.35	348.12	380.47	404.88	420.55	434.91			
Increase	31.77	32.35	24.41	15.67	14.36				
50,000 Gallons Water									
40,000 Gallons Wastewater	\$ 225.47	\$ 274.86	\$ 323.61	\$ 361.07	\$ 380.81	\$ 398.01			
Water Charge	308.78	317.91	327.51	333.96	340.84	347.75			
Total	534.25	592.77	651.12	695.03	721.65	745.76			
Increase	58.52	58.35	43.91	26.62	24.11				
*	11.0%	9.8%	6.7%	3.8%	3.3%				
* Non-Residential WW accounts are billed on 80% of Water consumption									

The tables in this section present rates for a five-year period. While this study presents a forecast of rates over the next decade, it is recommended that the City monitor actual growth in accounts and consumption, and update its forecasts annually due to the dynamic nature of growth in the City, and the rapid rate of change within the utility and the City. Periodic reviews will enable the City to assess the need for adjustments to the long-term rate plan.

Exhibit ES-10 presents a detailed summary of the rate model for this alternative including the projected revenues and expenses.

		CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025

**Water and WW Model Summary
Scenario: 2015 05 25 - WPC - Phase In**

1 WATER Revenues and Expenses

Revenues										
Water Rate Revenues	\$ 12,076,192	\$ 14,764,794	\$ 17,575,142	\$ 19,856,488	\$ 21,708,406	\$ 23,460,784	\$ 25,093,555	\$ 26,746,032	\$ 28,333,768	\$ 29,939,332
Water Non-Rate Revenues	2,208,963	1,415,914	1,458,392	1,502,143	1,547,208	1,593,624	1,641,433	1,690,676	1,741,396	1,793,638
Total Revenues	14,287,155	16,180,708	19,033,534	21,358,632	23,255,614	25,054,408	26,734,988	28,436,708	30,075,164	31,732,970
Operating Expenses										
CAP Water Costs	1,012,000	1,520,000	2,009,000	2,352,777	2,739,702	2,983,288	3,277,365	3,598,805	3,949,162	3,949,162
5110 -- Administration	1,004,933	1,042,713	1,083,501	1,126,453	1,171,726	1,219,692	1,270,390	1,324,037	1,380,870	1,441,149
5120 -- Distribution	1,516,434	1,766,580	2,045,490	2,381,304	2,859,716	3,141,207	3,445,811	3,775,595	4,132,827	4,664,719
5130 -- Production	2,712,371	3,122,460	3,530,467	4,075,941	4,409,581	4,849,544	5,267,684	5,727,568	6,337,254	6,900,045
260,679	273,981	289,898	463,862	490,424	519,109	519,783	771,814	817,699	866,881	866,881
232,615	244,395	256,961	270,375	284,704	300,023	316,412	333,957	352,753	372,904	372,904
702,702	723,783	745,497	767,861	790,897	814,624	1,061,729	1,093,581	1,126,389	1,160,180	1,160,180
218,950	225,519	232,284	239,253	246,430	253,823	261,438	269,281	277,359	285,680	285,680
Total Water Operating Expenses	7,660,684	8,919,430	10,193,098	11,677,826	12,993,181	14,081,310	15,629,811	16,894,639	18,374,314	19,640,721
Transfers Out	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000
Net Revenues before Capital Expenses	5,926,471	6,561,278	8,140,436	8,980,806	9,562,434	10,273,098	10,405,177	10,842,069	11,000,850	11,392,249
Capital Expenses										
Capital Outlays	907,353	672,636	926,795	1,181,079	1,435,491	1,470,036	1,505,617	1,542,265	1,580,013	1,618,894
Supplements -- Capital Outlays	-	500,000	525,000	551,250	578,813	607,753	638,141	670,048	703,550	738,728
Debt Service -- Current	5,522,593	5,517,720	5,523,916	5,432,039	5,441,618	4,583,798	4,536,660	4,529,301	4,548,247	4,547,497
Debt Service -- Future	-	404,811	925,282	1,908,393	2,024,053	2,370,130	2,370,130	2,699,761	2,699,761	5,059,711
Total Capital Expenses	6,429,946	7,095,167	7,900,993	9,072,761	9,479,975	9,031,717	9,050,547	9,441,376	9,531,572	12,004,829
Total Cost of Service	14,790,630	16,714,596	18,754,090	21,450,587	23,173,155	23,813,027	25,380,358	27,036,015	28,605,886	32,345,550
Net Revenues	(503,475)	(533,888)	239,443	(91,955)	82,459	1,241,382	1,354,629	1,400,693	1,469,278	(612,580)

		CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025

Water and WW Model Summary
Scenario: 2015 05 25 - WPC - Phase In

2 WASTEWATER Revenues and Expenses

Revenues	\$ 13,533,078	\$ 14,316,819	\$ 14,872,799	\$ 15,699,863	\$ 16,579,440	\$ 17,504,113	\$ 18,476,091	\$ 19,505,798	\$ 20,599,877	\$ 21,749,977
WW Rate Revenues	\$ 148,380	\$ 152,831	\$ 157,416	\$ 162,139	\$ 167,003	\$ 172,013	\$ 177,173	\$ 182,489	\$ 187,963	\$ 193,602
WW Non-Rate Revenues										
Total Revenues	\$ 13,681,458	\$ 14,469,650	\$ 15,030,215	\$ 15,862,002	\$ 16,746,443	\$ 17,676,126	\$ 18,653,264	\$ 19,688,286	\$ 20,787,840	\$ 21,943,579
Operating Expenses										
5210 -- Administration	317,493	331,775	347,126	363,371	380,574	398,803	418,130	438,634	460,400	483,520
5220 -- Collection System	913,327	966,192	1,126,981	1,301,746	1,380,338	1,582,130	1,678,945	1,782,866	1,894,477	2,014,417
5234 -- Environmental Quality	450,369	472,378	496,298	521,701	639,323	672,817	708,470	746,444	786,912	830,062
Other Collection Expense	-	-	-	-	-	-	-	-	-	-
Other Collection Expense	613,514	663,105	757,627	808,450	863,491	990,929	1,058,719	1,132,232	1,289,031	1,379,333
5251 -- Corgett WWTP	1,400,575	1,568,329	1,686,177	1,836,203	2,053,237	2,223,865	2,410,978	2,686,778	2,914,866	3,165,307
5252 -- Goodyear WWTP	524,776	554,876	588,407	687,077	728,561	773,138	891,933	946,782	1,005,802	1,069,355
Total WW Operating Expenses	\$ 4,220,053	\$ 4,546,655	\$ 5,012,615	\$ 5,518,549	\$ 6,045,526	\$ 6,641,681	\$ 7,167,175	\$ 7,733,756	\$ 8,351,488	\$ 8,941,994
Transfers Out	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Net Revenues before Capital Expenses	\$ 8,261,405	\$ 8,722,996	\$ 8,817,600	\$ 9,143,453	\$ 9,500,918	\$ 9,834,445	\$ 10,286,089	\$ 10,754,550	\$ 11,236,352	\$ 11,801,585
Capital Expenses										
Capital Outlays	1,208,369	2,050,488	1,928,962	2,152,600	2,600,000	3,748,686	3,748,686	3,748,686	3,748,686	3,748,686
Supplementals -- Capital Outlays	-	400,000	512,500	625,625	789,406	803,877	819,070	835,024	851,775	869,364
Debt Service -- Current	5,400,149	5,425,230	5,157,387	5,331,284	5,457,347	3,823,433	3,187,490	3,184,221	3,199,401	3,199,401
Debt Service -- Future	-	433,726	433,726	433,726	433,726	433,726	693,961	693,961	1,561,413	1,561,413
Total Capital Expenses	\$ 6,608,518	\$ 8,309,444	\$ 8,032,575	\$ 8,543,235	\$ 9,280,479	\$ 8,809,722	\$ 8,449,208	\$ 8,461,892	\$ 9,361,275	\$ 9,378,864
Total Cost of Service	\$ 12,028,572	\$ 14,056,099	\$ 14,245,190	\$ 15,261,784	\$ 16,526,004	\$ 16,651,403	\$ 16,816,383	\$ 17,395,629	\$ 18,912,763	\$ 19,520,857
Net Revenues	\$ 1,652,887	\$ 413,552	\$ 785,025	\$ 600,218	\$ 220,439	\$ 1,024,723	\$ 1,836,882	\$ 2,292,658	\$ 1,875,077	\$ 2,422,721

		CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025

**Water and WW Model Summary
Scenario: 2015 05 25 - WPC - Phase In**

3 TOTAL Revenues and Expenses

Revenues											
Rate Revenues	\$ 25,611,270	\$ 29,081,613	\$ 32,447,941	\$ 35,556,352	\$ 38,287,847	\$ 40,964,898	\$ 43,569,646	\$ 46,251,830	\$ 48,933,645	\$ 51,689,309	
Non-Rate Revenues	2,357,343	1,568,746	1,615,808	1,664,292	1,714,211	1,765,637	1,818,606	1,873,164	1,929,359	1,987,240	
Total Revenues	27,968,613	30,650,358	34,063,749	37,220,634	40,002,058	42,730,535	45,388,252	48,124,994	50,863,004	53,676,549	
Operating Expenses											
Transfers Out	11,880,737	13,466,084	15,205,713	17,196,375	19,038,706	20,722,992	22,796,986	24,628,375	26,725,802	28,582,715	
	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	
Net Revenues before Capital Expenses	14,187,876	15,284,274	16,958,036	18,124,258	19,063,351	20,107,543	20,691,266	21,596,619	22,237,202	23,193,834	
Capital Expenses											
Capital Outlays	2,115,722	2,723,124	2,855,757	3,333,679	4,035,491	5,218,722	5,254,303	5,290,952	5,328,700	5,367,580	
Supplements -- Capital Outlays	-	900,000	1,037,500	1,176,875	1,368,219	1,411,630	1,457,211	1,505,072	1,555,325	1,608,092	
Debt Service -- Current	10,922,743	10,942,950	10,681,303	10,763,323	10,898,965	8,407,231	7,724,150	7,113,522	7,747,648	7,746,898	
Debt Service .. Future	-	838,536	1,359,007	2,342,119	2,457,779	2,803,856	3,064,091	3,393,723	4,261,174	6,661,123	
Total Capital Expenses	13,038,465	15,404,610	15,933,568	17,615,986	18,760,454	17,841,438	17,489,755	17,903,268	18,892,847	21,383,693	
Total Cost of Service	26,819,202	30,770,695	33,039,280	36,712,371	39,699,160	40,464,430	42,196,741	44,431,643	47,518,650	51,866,407	
Net Revenues	1,149,411	(120,336)	1,024,468	508,263	302,898	2,266,105	3,191,511	3,693,351	3,344,355	1,810,141	
	4.1%	-0.4%	3.0%	1.4%	0.8%	5.3%	7.0%	7.7%	6.6%	3.4%	

Notes on Rate Recommendation

The forecast and recommendations presented in this study represent a combination of the best information available from the City and the project team's expertise. However, this forecast relies in part on assumptions about future events and events beyond the control of the project team (such as account growth rates within the City). The forecast and recommendations contained in this study may be subject to revision if any of the following events occurs:

- Actual growth in accounts and consumed volumes is less than (or significantly greater than) forecast
- Capital improvement plan funding costs increase significantly due to the rising cost of materials or other factors
- An unforeseen event impacts the City, such as an extended recession, natural catastrophe or terrorist attack
- Increases or decreases in interest rates, coverage requirements or reserve requirements for municipal long-term debt.
- City budget levels or priorities change significantly from those forecast in this study

It should be noted that none of these events are foreseen by the project team or the City at this time.

If any of these events occur the City may be compelled to consider further adjustments to its water and wastewater rates.

Non-Rate Fees and Services Cost Analysis

The City's Non-Rate Fees have not been reviewed or adjusted over the past 7 years. The City seeks to analyze the cost it incurs in providing each of these services to the associated ratepayer as well as an analysis of what other cities charge for similar fees and services. This will form the basis of the fee recommended to be charged for each service. In order to be properly calculated and implemented, each category of Non-Rate Fees and Services must have its costs calculated according to a basic, generally-accepted methodology. This methodology has been closely followed during the course of this study. The non-rate revenue calculation model contained in **Appendix B** of this report presents the cost calculation methodology in detail and the full Executive Summary of this portion of the study is presented in **Section V** of this report.

Section I

SECTION I

Introduction and Demographic Profile

Background



In January 2014 the City of Goodyear, Arizona (the "City") engaged **Economists.com** to conduct a water and wastewater utility cost of service rate study and develop a long-term financial plan. The City was interested in evaluating the cost of service for each defined customer class and developing a comprehensive rate plan for Fiscal Year ("FY") 2015 and beyond. The City utilizes standard governmental accounting procedures for its general and enterprise funds. The Fiscal Year begins on July 1st and ends on the following June 30th.

By April 2014, recommendations for FY 2015 were provided. The City made the decision to place the study on hiatus for several months while the City's engineering consultants completed their draft of the new Water Master Plan. In early 2015 the study resumed. This next phase of the study included the analysis and incorporation of the revised Capital

Improvement Plan ("CIP") developed in conjunction with the Water Master Plan and the development of a comprehensive rate plan for Fiscal Year ("FY") 2016 and beyond.

In this study, FY 2016 will also be referred to as the Test Year ("TY"). As noted in the AWWA Manual M1, (6th Edition; page 11), the selection of a test year is an important starting point for establishing a utility's revenue requirements. The test year may be based entirely on historical data, projected data, or, as in this study, "pro forma" which begins with historical costs and then adjusts for those "known and measurable" changes.

The City identified numerous objectives for this study, including but not limited to the following:

- A comprehensive analysis and evaluation of the water and wastewater systems' current cost of service and revenue requirements
- An estimate of current and forecast accounts, volumes and billing units for the ten year forecast period
- An assessment and evaluation of the known and potential changes occurring within the City's utility systems including but not limited to CAP water costs and supplemental capital projects
- A forecast of operating expenses over the next decade, taking into consideration such factors as inflation, system growth, and increases in staffing levels

- A thorough review of the water and wastewater systems' known capital improvement needs, as well as a determination of the need for funding capital requirements through the issuance of long-term debt
- The development of a rate structure that would recover the City's cost of service, ensure equitable, just and reasonable treatment of identified customer classes, and maintain critical financial ratios
- An analysis of the existing water rate block structure for overall effectiveness
- A review of the City's Non-Rate Fees and Services Revenue and recommendations for updates

In conjunction with City staff, the project team evaluated numerous alternative scenarios and rate structures, each of which would enable the City to achieve these objectives while continuing to provide ratepayers with superior quality water and wastewater service. After a series of meetings with City staff, the Water Planning Committee and the City Council, the project team narrowed its recommendations to the alternative water and wastewater rate designs contained in this study. The analysis and recommendations presented in this study achieve all of the objectives outlined above.

Report Organization

This report is organized into the following sections:

Section I – Introduction and Demographic Profile - outlines the background, objectives and scope of this rate study and long-term financial plan. Also presents the City's current rate structures and a demographic profile of the City of Goodyear. This includes a comparison of the City's water and wastewater charges with other cities in Arizona.

Section II – Water and Wastewater Test Year and Forecast Volumes – analyzes the City's customer base, total accounts and current volumes of treated water and wastewater. This section presents totals for the current year and a forecast ten years into the future.

Section III – Water and Wastewater Test Year and Forecast Revenue Requirement – outlines the process of analyzing the City's current water and wastewater utility cost structure. The total current or "test year" revenue requirements are developed, and costs are functionalized between treatment, distribution/collection, administration and customer billing. Using the test year as a basis, costs are forecast for a ten-year period.

Section IV – Water and Wastewater Rate Design – presents a rate design recommendation for the City to consider which would enable it to meet its revenue requirements over the next decade. Also presents an analysis of the impact of these alternative rate plans on each defined customer class.

Section V – Non-Rate Fees and Services Cost Analysis – Analyzes the City's fees and services that are provided to customer who are specifically requesting services or who are violating the utility's codes.

Appendix A – presents a hard copy printout of key worksheets from the Microsoft Excel spreadsheet model developed for the City to calculate water and wastewater current and future revenue requirements. The model automatically generates all calculations based on a set of defined user inputs.

Appendix B – presents a hard copy printout of the Non-Rate Revenue Fees and Recommendations Study.



City Leadership

Goodyear, Arizona is a city with a rich, rewarding quality of life and tremendous community spirit, exemplified by two prestigious national awards in 2008 – The All-American City and City Livability awards. Goodyear is one of the fastest growing cities in the Valley. According to the 2014 US Census Bureau, Goodyear was the 6th fastest growing city in the country (over 50,000 population). Goodyear offers all the advantages of a small community, with all the cultural and entertainment resources that the Phoenix area offers.

Goodyear is strategically located at the base of the Estrella Mountains, in the southwest portion of the Phoenix metro area, just 20 minutes west

of downtown Phoenix. Its location on Interstate 10 provides access to Los Angeles to the west, Phoenix and Tucson to the east. In the fall of 2014, the Loop 303 and I-10 Interchange project was completed, providing access north of the I-10 through Goodyear to I-17. The nearby Loop 101, Interstate 17 and Interstate 8 open gateways to the whole Phoenix metro area, Flagstaff and San Diego. With just under 90 percent of its total 189 square miles of land still available for development, Goodyear remains a city of great opportunity.

This accessibility has attracted major employers including West Valley Hospital (Goodyear's largest employer as of 2010), Cancer Treatment Centers of America, Macy's, Bloomingdales, Amazon.com, Sub-Zero-Wolf Appliances, and AeroTurbine. Numerous industrial and office parks are under development, including development of an airpark employment corridor at the Phoenix-Goodyear Airport.

Goodyear is the Spring Training home of the Cleveland Indians and the Cincinnati Reds. The desert vistas, majestic mountains, and master planned communities with lakes, country clubs and golf courses encourage an active outdoor lifestyle that attracts many residents and businesses to Goodyear.

The City operates under a Council-Manager form of government. The Council consists of the Mayor and six council members- all elected at large on a non-partisan ballot. The Mayor and Council serve four year terms. The Mayor has a two term limit and Council a three term limit. Council members serve staggered terms.

The City Manager reports to the Mayor, Council and the Citizens of Goodyear, and is responsible for the day-to-day operations of the City. All changes to the City's water and wastewater rate structure must be approved by a vote of the Council. **Table I-1** lists current serving City officials.

TABLE I-1

CITY OF GOODYEAR		CITY OFFICIALS -- JUNE 2015			
Mayor and Council			Senior City Staff		
		Term Expires			
Georgia Lord	<i>Mayor</i>	2017	Brian Dalke	<i>City Manager</i>	
Sheri Lauritano	<i>Vice Mayor</i>	2019	Bob Beckley	<i>Deputy City Manager</i>	
Joanne Osborne	<i>Council Member</i>	2019	Wynette Reed	<i>Deputy City Manager</i>	
Joe Pizzillo	<i>Council Member</i>	2017	Larry Lange	<i>Director of Finance</i>	
Wally Campbell	<i>Council Member</i>	2017	Mark Seamans	<i>Environmental Services Division</i>	
Bill Stipp	<i>Council Member</i>	2019	Mark Holmes	<i>Water Resources Division</i>	
Sharolyn Hohman	<i>Council Member</i>	2017	Maureen Scott	<i>City Clerk</i>	

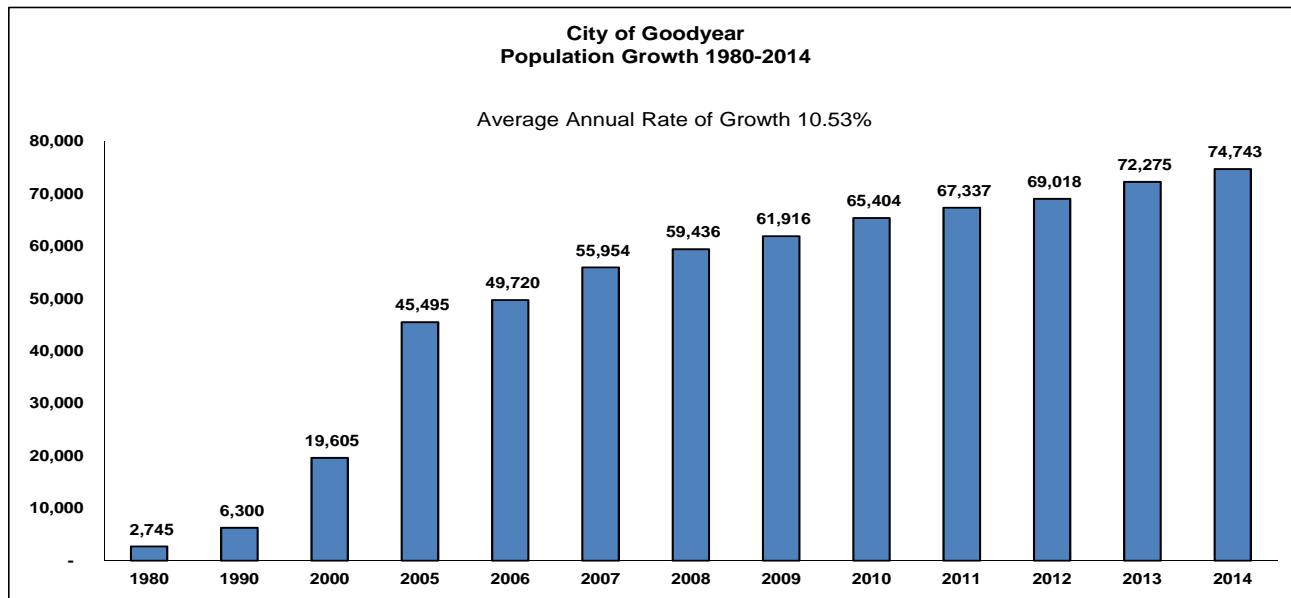
In addition, the City utilizes various Boards and Commissions to advise Council, including the Water Planning Committee which was created at the outset of this study. The Water Planning Committee was involved at several milestones of the study for both informational and review purposes, and provided both input and recommendations.

Population – Current and Projected

The City's population has grown significantly over the past 30 years. In the decade prior to the 2008 economic downturn, many Arizona cities, including the City of Goodyear experienced an exceptionally high rate of growth. Chart I-2 illustrates the rate of growth realized by the City from 1980 – 2014. During this time the City's population increased from 2,745 to 74,743, an average annual growth rate of 10.53% for the 34 year period, and an average annual growth rate of 14.32% occurring between 2000 and 2008. Since 2008 the pace of growth in Goodyear and throughout Arizona has slowed dramatically. Between 2008 and 2014, the City's average annual growth rate slowed to approximately 4.69%.

Despite the economic slowdown, the City continues to be highly attractive to new residents and is still sixth in the nation in terms of overall growth. Projections provided to the project team by City staff forecast that the City will experience a gradual acceleration of growth as the economy recovers.

CHART I-2



Population forecasts completed by the Maricopa Association of Governments ("MAG") and the State Demographers Office at the Arizona Department of Administration ("ADOA") are provided in Chart I-3. The City of Goodyear is projected to reach a population in excess of 240,000 by 2040.

Complicating the task of projecting account growth and consumption for the City is the presence of several other water service providers within the City's Metropolitan Planning Area ("MPA"). Thus population growth may occur within the City's water service area, or in the service territories of other water providers.

The focus for this study is the development of rate design and financial plans for the known service area of the City, as it currently exists. The rate of projected growth, the uncertainty of where and when growth will occur, and the complexity of building infrastructure for this City will require frequent reassessment of the City's capital expenditures, consumption and revenue projections, and rate design. For these reasons, the project team recommends that annual or biennial updates to the study be conducted.

CHART I-3

CITY OF GOODYEAR

Historical and Forecast Population

State of Arizona	% Annual Growth	Maricopa County	% Annual Growth	City of Goodyear	% Annual Growth
2000	5,130,247	3,072,415		19,605	
2010	6,401,569	3,824,058	2.21%	68,031	13.25%
P2020	7,485,000	4,506,900	1.58%	115,307	5.42%
P2030	8,852,800	5,350,000	1.69%	167,650	3.81%
P2040	10,218,200	6,174,900	1.44%	241,407	3.71%

Growth percentage represents average annual % change from previous entry

Water and Wastewater Current Rates

Table I-4 summarizes the City's current water, wastewater and effluent (reclaimed water) rates.

TABLE I-4

CITY OF GOODYEAR		
CURRENT WATER AND WASTEWATER RATES		
WATER RATES Effective January 2015		WASTEWATER RATES Effective January 2013
Residential - City Water Base Rates		Residential - City Wastewater Rates
3/4" Meter \$ 11.24		3/4" Meter \$ 21.12
1" Meter 15.54		1" Meter 32.41
1 1/2" Meter 25.12		1 1/2" Meter 39.94
2" Meter 40.67		2" Meter 77.58
Residential - City Water Volume Rates		Residential - City Wastewater Rates
Volume Rate (per 1,000 Gallons)		Volume Rate (per 1,000 Gallons)
0 - 6,000 \$ 1.30		All \$ 5.78
6,001 - 12,000 2.59		
12,001 - 30,000 3.89		
30,001 & Above 6.25		
Residential - County Water Base Rates		Residential - County Wastewater Base Rates
3/4" Meter \$ 14.06		3/4" Meter \$ 26.40
1" Meter 19.43		1" Meter 40.51
1 1/2" Meter 31.41		1 1/2" Meter 49.93
2" Meter 50.84		2" Meter 96.98
Residential - County Water Volume Rates		Residential - County Water Volume Rates
Volume Rate (per 1,000 Gallons)		Volume Rate (per 1,000 Gallons)
0 - 6,000 \$ 1.63		All \$ 7.23
6,001 - 12,000 3.24		
12,001 - 30,000 4.87		
30,001 & Above 7.81		
Non-Residential Water Base Rates		Non-Residential Wastewater Base Rates
(Multi-Family, Commercial, Churchs, Hydrant, Institutional & Schools)		(Multi-Family, Commercial, Churchs, Hydrant, Institutional & Schools)
3/4" Meter \$ 11.24		3/4" Meter \$ 21.12
1" Meter 15.54		1" Meter 32.41
1 1/2" Meter 25.12		1 1/2" Meter 39.94
2" Meter 40.67		2" Meter 77.58
Non-Residential Water Volume Rates		Non-Residential Wastewater Volume Rates
Volume Rate (per 1,000 Gallons)		Volume Rate (per 1,000 Gallons)
0 - 40,000 \$ 3.30		All \$ 5.78
40,001 - 100,000 5.28		
100,001 & Above 6.86		
Irrigation Volume Rates		Perryville Prison
Volume Rate (per 1,000 Gallons)		Volume Rate (per 1,000 Gallons)
0 - 80,000 \$ 4.95		All \$ 5.78
80,001 & Above 5.69		
Reclaimed Water (Effluent) Rates		
All Usage per 1,000 Gallons 2.51		
Base charge is assessed by meter size (same as water,ww)		

All City water accounts are assessed a base charge based on meter size in addition to their inverted block volumetric rate structure. Non-residential water accounts currently are charged under an inverted block

volumetric rate. Multi-Family, schools, churches, hydrants and institution accounts are assessed commercial rates. Irrigation customers pay the commercial base rates, but an inverted volumetric rate. Residential-County Accounts are located outside of the city limits have base charges ranging from 25% higher than Residential-City accounts. Water Volume rates for Residential-County customers for all tiers are also charged at 25% higher than City accounts.

Residential wastewater accounts pay a base charge based on meter size as well as a flat volumetric rate. Multi-Family, schools, churches, hydrants and institution accounts are assessed commercial rates which include a base charge based on meter size and a flat volumetric rate. Until July 2015, the Perryville Prison paid the City for sewer services based on a long standing contractual agreement with the City. Beginning in July 2015, the Prison began paying the commercial volumetric charge.

Treated Effluent, or Reclaimed Water is sold for use in landscape irrigation. The current reclaimed water (effluent) rates include a base charge based on meter size and a flat volumetric charge.

Historical and Current Rates and Comparisons

The City most recently adjusted water rates in January 2015. Wastewater rates remained the same as implemented in 2013. Historically the City's water and wastewater rates have been adjusted only modestly over time, and as shown in **Chart I-5**, a residential ratepayer is currently paying virtually the same for 7,500 gallons of water as in 2009. Wastewater rates have increased at an annual rate of 8.92% since 2009.

CHART I-5

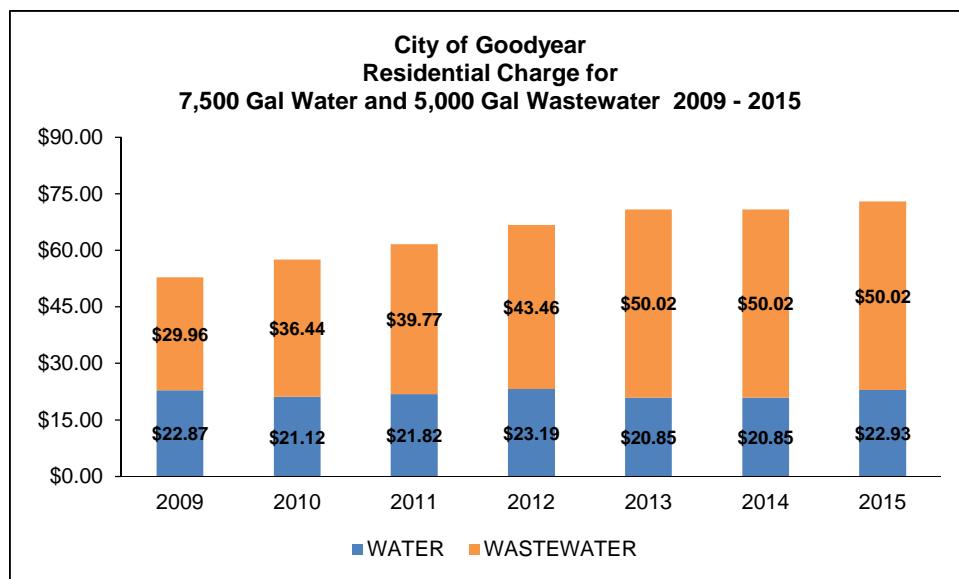


Table I-6 compares the City's monthly charges for an average household's usage of 7,500 gallons of water service and 5,000 gallons of wastewater service to those of other nearby providers in the Phoenix area. The table also includes population totals and the average monthly water and sewer bill as a percentage of household income. **Chart I-7** presents the combined average charges graphically. Volumes of 7,500 gallons water and 5,000 gallons wastewater were used for the comparison as they represent typical usage levels for an average household in Arizona. The rate data is based on published rates and ordinances posted by each municipality or provider in their rate ordinance or reported on their website.

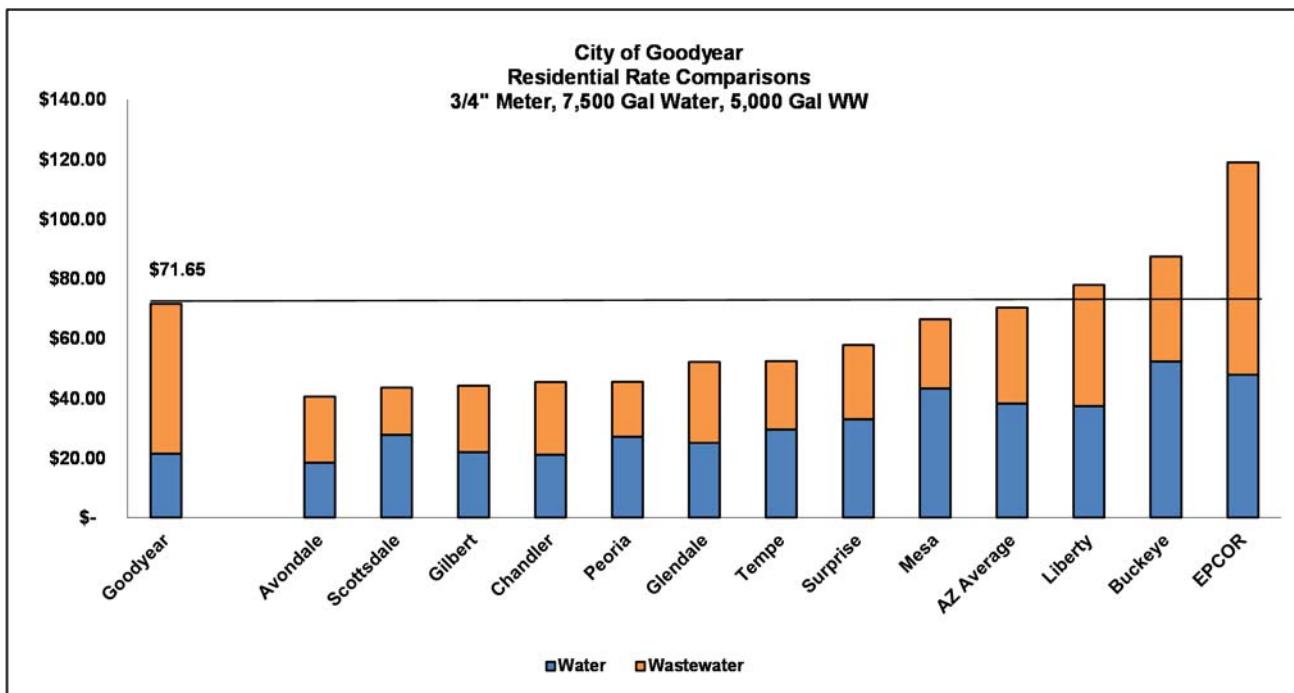
These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges. Comparisons such as these are for usage charges only. *This type of comparison may have the unintended effect of discriminating against communities who choose to finance system expansions through current rates or revenue bonds, which are included in rates, as opposed to those who utilize general obligation bonds, which are funded through taxes.* All else being equal, a City that primarily or exclusively uses general obligation bonds will have a lower water rate per 1,000 gallons but a higher tax rate.

TABLE I-6

CITY OF GOODYEAR									
MONTHLY RESIDENTIAL CHARGES -- 7,500 GALLONS WATER (3/4" Meter) AND 5,000 GALLONS WASTEWATER									
	2014 Population	Yr 2012 Median HH Income	Date of Most Recent Rate Adjustment	Water	Wastewater	Total	% of Median HH Income		
Goodyear	72,864	72,368	January-15	\$ 21.63	\$ 50.02	\$ 71.65	1.19%		
Chandler	249,146	71,171	October-13	21.31	24.17	45.48	0.77%		
Avondale	78,822	57,791	December-08	18.58	22.10	40.68	0.84%		
Gilbert	229,972	80,921	July-09	22.19	22.10	44.29	0.66%		
Tempe	168,228	47,882	January-14	29.70	22.75	52.45	1.31%		
Mesa	457,587	49,233	August-13	43.32	23.10	66.42	1.62%		
Scottsdale	226,918	72,163	July-13	27.95	15.65	43.60	0.73%		
Buckeye	56,683	62,800	April-15	52.41	34.99	87.40	1.67%		
Glendale	234,632	47,474	July-10	25.22	27.00	52.22	1.32%		
Peoria	162,592	62,013	July-12	27.31	18.32	45.63	0.88%		
Surprise	123,546	58,455	August-14	33.10	24.78	57.88	1.19%		
Liberty				37.49	40.35	77.84			
EPCOR				47.88	71.16	119.04			
Sample Average	62,025			\$ 31.39	\$ 30.50	\$ 61.89	1.20%		
AZ Average 2013-14 WIFA Survey	49,774			\$ 38.35	\$ 31.98	\$ 70.33	1.70%		

Source: US Census Bureau, 2013-14 WIFA Survey & municipal websites

CHART I-7



Section II

SECTION II

Water & Wastewater Test Year and Forecast Volumes



month and the associated revenues. Additionally, these records provided the number of accounts, billing units and revenues by month for all classifications of wastewater customers.

According to standard utility ratemaking methodology, in order to allocate revenue requirements equitably among system users, customers must be classified into relatively homogeneous groups with similar usage characteristics or service demands. Costs are then allocated to the customer classes in proportion to the usage characteristics of each class. For the water system, costs are typically allocated to customers based on their average and peak water demands. For the wastewater system, costs are allocated to customers based on their estimated wastewater flows, and in some cases, based on wastewater strengths.

After thoroughly examining volume and customer data and discussions with City staff, the project team incorporated the City's 15 currently active water billing rate classifications into 11 distinct customer classes, and the City's 13 active wastewater billing rate classifications into 10 distinct customer classes. The project team finds these customer class distinctions to be reasonable and appropriate, meeting the criteria of homogenous groups with similar usage patterns.

In this section the City's functional customer classes and test year usage patterns will be thoroughly analyzed. A ten-year projection of customers and usage will also be presented. These forecasts, along with the revenue requirements, will form the basis of the rate design recommendation.

In order to accurately forecast future revenues and expenses, it is necessary to examine current water and wastewater utility conditions. The first step in developing cost of service rates is to analyze patterns of usage, both for the system as a whole and for specified customer classes.

For the City of Goodyear, water and wastewater records maintained by the City were reviewed for the three year period beginning July 2011. These records provided information on the monthly water volumes distributed system-wide as well as the number of accounts for each

Water and Wastewater Customers – Current Year

The majority of the City's accounts are Residential-City which are located inside the city limits. The Residential-County customer classes for both water and wastewater are relatively small and are expected to experience little growth during the forecast period. The City's customer categories from their billing system and the corresponding consolidated rate model customer classes are outlined in **Table II-1**.

TABLE II-1

CITY OF GOODYEAR		WATER AND WASTEWATER CUSTOMERS - JANUARY 2015												
		WATER CUSTOMERS						WASTEWATER CUSTOMERS						
City Classification		Rate Study			City Classification		Rate Study			City Classification		Rate Study		
1	Residential - City	W1	Residential - City	1	1	Residential - City	WW1	Residential - City	1	1	Residential - City	WW1	Residential - City	1
2	Residential - County	W2	Residential - County	2	2	Residential - County	WW2	Residential - County	2	2	Residential - County	WW2	Residential - County	2
3	Multi-Family	W3	Multi-Family - City	3	3	Multi-Family	WW3	Multi-Family - City	3	3	Multi-Family	WW3	Multi-Family - City	3
4	Commercial	W4	Commercial - City	4, 6, 8, 11, 12	4	Commercial	WW4	Commercial - City	4, 6, 10, 11	4	Commercial	WW4	Commercial - City	4, 6, 10, 11
5	Church	W5	Church - City	5	5	Church	WW5	Church - City	5	5	Church	WW5	Church - City	5
6	Carwash	W6	Industrial - City	7	6	Carwash	WW6	Industrial - City	7	6	Carwash	WW6	Industrial - City	7
7	Industrial	W7	Hydrant - City	9	7	Industrial	WW7	Effluent	8	7	Industrial	WW7	Effluent	8
8	Hydrant - POT	W8	Institutional - City	10	8	Effluent	WW8	Institutional - City	9	8	Effluent	WW8	Institutional - City	9
9	Hydrant - F&D Const	W9	School - City	13	9	Institutional	WW9	School - City	12	9	Institutional	WW9	School - City	12
10	Institutional	W10	Irrigation - City	14	10	Laundry Mat	WW10	Perryville Prison	13	10	Laundry Mat	WW10	Perryville Prison	13
11	Laundry Mat	W11	Reclaimed	15	11	Multi-Purpose				11	Multi-Purpose			
12	Multi-Purpose				12	School				12	School			
13	School				13	Perryville Prison				13	Perryville Prison			
14	Irrigation													
15	Reclaimed Water													

As stated in Section I of this study, the City currently charges an inverted block volume rate to all customers. All non-residential water and wastewater accounts are charged a monthly base charge corresponding to water meter size. The current schedule of base charges is close to the AWWA recommended meter equivalencies schedule. **Table II-2** presents the distribution of meter sizes within each consolidated customer class as of December 2014.

TABLE II-2

CITY OF GOODYEAR		WATER ACCOUNTS BY METER SIZE – December 2014 and Forecast for Test Year FY 2016											
Meter Sizes		Residential-	Residential-	Commercial	Church	Industrial	Hydrant	Institutional	Schools	Irrigation	Reclaimed	Total	
		City	County										
December 2014 - Total Active Water Accounts													
3/4"		13,292	86	-	36	1	6	-	2	-	66	-	13,489
1"		2,067	1	27	48	6	7	-	2	1	105	-	2,264
1 1/2"		4	1	-	88	7	5	1	2	-	92	-	200
2"		-	-	6	131	4	20	-	12	22	129	-	324
3"		-	-	-	8	-	-	11	2	2	2	-	25
4"		-	-	3	9	-	3	-	-	1	1	-	17
6"		-	-	-	8	-	-	-	1	-	8	-	17
8"		-	-	-	-	-	-	-	-	-	-	-	-
Total		15,363	88	36	328	18	41	12	21	26	403	-	16,336
Projected TY Acct Growth		346	-	-	17	1	1	1	1	1	-	-	368
Total FY 2016 Accounts		15,709	88	36	345	19	42	13	22	27	403	-	16,704
December 2014 - Active Accounts by Percentage													
3/4"		86.52%	97.73%	0.00%	10.98%	5.56%	14.63%	0.00%	9.52%	0.00%	16.38%	0.00%	82.57%
1"		13.45%	1.14%	75.00%	14.63%	33.33%	17.07%	0.00%	9.52%	3.85%	26.05%	0.00%	13.86%
1 1/2"		0.03%	1.14%	0.00%	26.83%	38.89%	12.20%	8.33%	9.52%	0.00%	22.83%	0.00%	1.22%
2"		0.00%	0.00%	16.67%	39.94%	22.22%	48.78%	0.00%	57.14%	84.62%	32.01%	0.00%	1.98%
3"		0.00%	0.00%	0.00%	2.44%	0.00%	0.00%	91.67%	9.52%	7.69%	0.50%	0.00%	0.15%
4"		0.00%	0.00%	8.33%	2.74%	0.00%	7.32%	0.00%	0.00%	3.85%	0.25%	0.00%	0.10%
6"		0.00%	0.00%	0.00%	2.44%	0.00%	0.00%	0.00%	4.76%	0.00%	1.99%	0.00%	0.10%
8"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	100.00%

Water and Wastewater Customers and Meters – Test Year & Ten Year Forecast

Table II-3 presents total water accounts and classifications for the City for the past two years and the forecast growth over the next decade. It is important to note that account growth for the City will not be comparable to total population growth, since the City is not the sole provider of water service within its total area. Growth estimates for TY 2016 include new accounts forecast in FY 2015 and 2016. The forecast for FY 2017 is 375 new accounts, which is based on account growth in FY 2014 and 2015. Account growth beginning in 2018 is based on 75% of the total growth estimated in the City's Land use Assumptions, Infrastructure Improvements Plan and Development Fees report published May 12, 2014.

In total, water accounts are forecast to increase from 16,704 in TY 2016 to 22,221 in FY 2024, an average annual increase of 3.22%. The project team considers these projections to be highly conservative, as circumstances such as a strong resurgence in development driven by a strengthening of the economy could substantially increase these projections.

TABLE II-3

CITY OF GOODYEAR												
FORECAST TOTAL ACCOUNTS WATER Customer Classes												
	Residential-City	Residential-County	Multi-Family	Commercial	Church	Industrial	Hydrant	Institutional	Schools	Irrigation	Reclaimed	Total
WATER Total Accounts												
Dec-13	15,042	88	36	303	17	39	9	19	25	407	-	15,985
Dec-14	15,363	88	36	328	18	41	12	21	26	403	-	16,336
TY 2016	15,709	88	36	345	19	42	13	22	27	403	-	16,704
2017	16,062	88	36	362	20	43	14	23	28	403	-	17,079
2018	16,593	91	37	381	21	44	14	24	29	416	-	17,650
2019	17,140	94	38	401	21	46	15	25	30	430	-	18,240
2020	17,706	97	40	422	22	47	15	25	31	444	-	18,850
2021	18,290	100	41	444	23	49	16	26	32	459	-	19,480
2022	18,894	104	42	468	24	51	16	27	33	474	-	20,132
2023	19,517	107	44	492	24	52	17	28	34	490	-	20,805
2024	20,161	110	45	518	25	54	18	29	35	506	-	21,501
2025	20,826	114	47	545	26	56	18	30	36	523	-	22,221
WATER Annual New Accounts												
TY 2016	667	-	-	42	2	3	4	3	2	(4)	-	719
2017	353	-	-	17	1	1	1	1	1	-	-	375
2018	530	1	1	18	1	1	1	1	1	-	-	571
2019	548	1	1	19	1	1	1	1	1	-	-	590
2020	566	1	1	20	1	1	1	1	1	-	-	610
2021	584	1	1	21	1	1	1	1	1	-	-	630
2022	604	1	1	22	1	1	1	1	1	-	-	652
2023	623	1	1	23	1	1	1	1	1	-	-	673
2024	644	1	1	24	1	1	1	1	1	-	-	696
2025	665	1	1	25	1	1	1	1	1	-	-	720

Table II-4 presents wastewater accounts and classifications for the City for the past two years and the forecast growth over the next decade. Wastewater account growth is forecast to be greater than that of water accounts due to the new wastewater accounts in developing areas in the City. As with water accounts, wastewater account growth estimates for FY 2017 is 456 new accounts annually, which is based on account growth in the past two years. Growth beginning in 2018 is based on 75% of the total growth estimated in the City's Land Use Assumptions, Infrastructure Improvements Plan and Development Fees report published May 12, 2014. In total,

wastewater accounts are forecast to increase from 15,814 in TY 2016 to 21,157 in FY 2024, an average annual increase of 3.29%.

The project team considers both water and wastewater account growth forecasts as presented in this study to be conservative, due to the prolonged effects that the current economic downturn has had on growth and development in Arizona. It must be stressed that if the City does not connect these projected new accounts, financial and rate plan assumptions will have to be modified.

TABLE II-4

CITY OF GOODYEAR											
FORECAST TOTAL ACCOUNTS WASTEWATER Customer Classes											
	Residential- City	Residential- County	Multi-Family	Commercial	Church	Industrial	Effluent	Institutional	School	Perryville Prison	Total
WASTEWATER Total Accounts											
Dec-13	14,553	4	36	275	17	27	-	17	23	7	14,959
Dec-14	14,969	4	36	269	17	26	-	16	25	8	15,370
TY 2016	15,397	4	36	280	18	27	-	17	27	8	15,814
2017	15,837	4	36	291	19	28	-	18	29	8	16,270
2018	16,360	4	37	306	20	29	-	19	30	8	16,813
2019	16,900	4	38	322	20	30	-	19	31	9	17,374
2020	17,458	4	40	339	21	31	-	20	32	9	17,953
2021	18,034	5	41	357	22	32	-	20	33	9	18,552
2022	18,629	5	42	376	22	33	-	21	34	9	19,172
2023	19,244	5	44	396	23	34	-	22	35	10	19,812
2024	19,879	5	45	416	24	35	-	23	36	10	20,473
2025	20,535	5	47	438	25	36	-	23	38	10	21,157
WASTEWATER Annual New Accounts											
TY 2016	844	-	-	5	1	-	-	-	4	1	855
2017	440	-	-	11	1	1	-	1	2	-	456
2018	523	-	1	11	1	1	-	1	2	-	540
2019	540	0	1	16	1	1	-	1	1	-	561
2020	558	0	1	17	1	1	-	1	1	-	580
2021	576	0	1	18	1	1	-	1	1	-	599
2022	595	0	1	19	1	1	-	1	1	-	619
2023	615	0	1	20	1	1	-	1	1	-	640
2024	635	0	1	21	1	1	-	1	1	-	661
2025	656	0	1	22	1	1	-	1	1	-	684

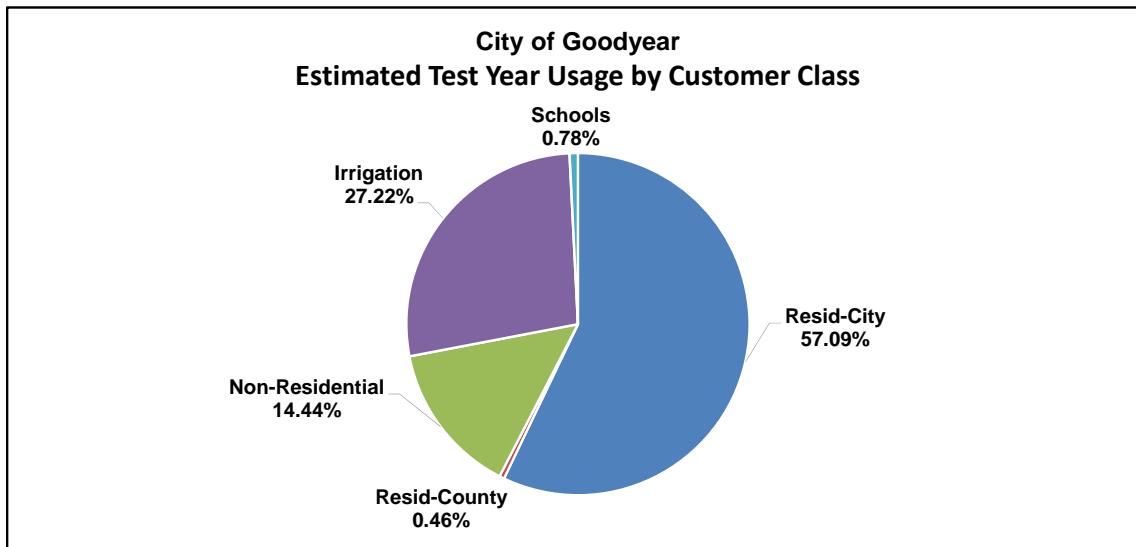
Historical and Forecast Water Consumption

Total water system consumption data was analyzed over the same time period as customer data. Forecast consumption for each account class was developed from the historical data provided. In accordance with the AWWA Manual M50, *Water Resource Planning*, a "weather-normalized" forecast was developed to represent consumption patterns anticipated for each customer class using historical data and trends. Weather patterns in Central Arizona are fairly predictable and rainfall totals are minimal, averaging approximately 4" annually in the City. Thus, while the hot, dry climate of summer requires more irrigation, rainfall is not generally a significant factor in consumption patterns.

However, changes in consumer behavior in response to changes in pricing and certain rate structures designed to encourage conservation were taken into account in forecasting consumption.

Chart II-5 presents the percentage of total forecast consumption by customer class in the test year. This chart illustrates the relative volume demands of each class, as well as the fact that the Residential- City customer class is the largest user, accounting for **57.09%** of test year billed consumption.

CHART II-5



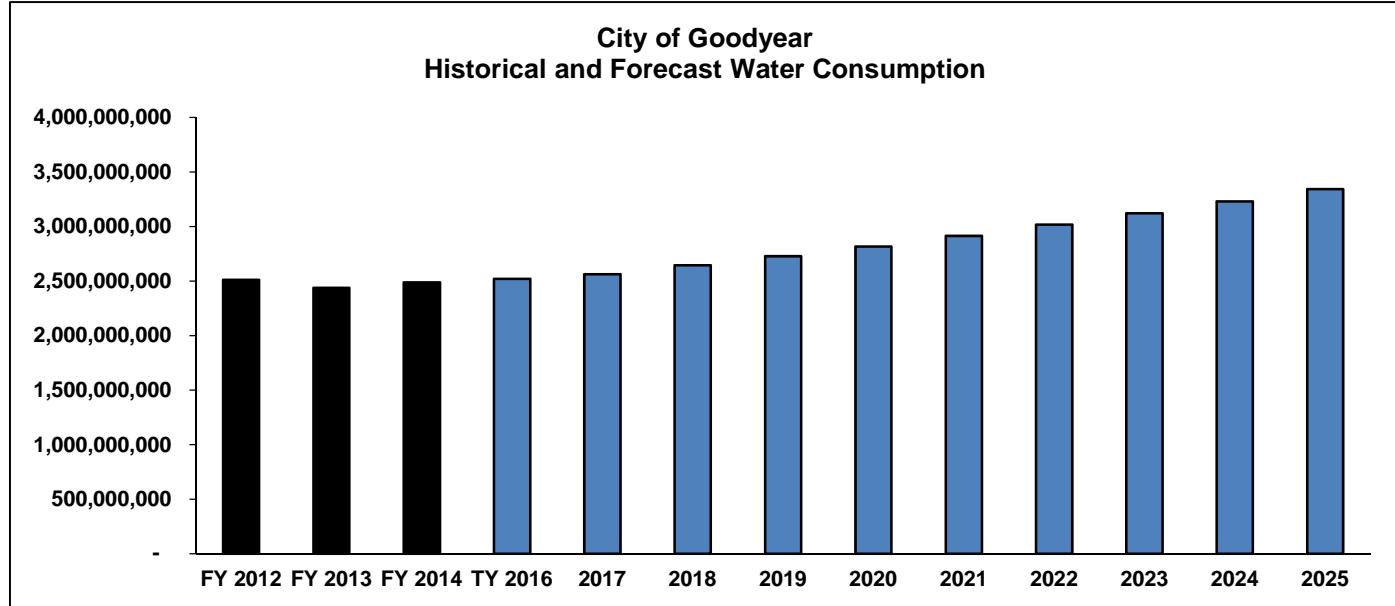
The project team forecasts total consumption of approximately **2,520,071,068** gallons of water in the test year FY 2016. Table II-6 and Chart II-7 present projected consumption by rate class for FY 2016 and the ten year forecast period. Forecast volumes include an elasticity factor in conjunction with increasing water rates which assumes slightly reduced consumption per account over the course of the forecast period.



TABLE II-6

CITY OF GOODYEAR												
FORECAST CONSUMPTION -- GALLONS WATER Customer Classes												
Residential-City	Residential-County	Multi-Family	Commercial	Church	Industrial	Hydrant	Institutional	Schools	Irrigation	Reclaimed	Total	
WATER Historical Volume												
FY2012	1,408,774,000	4,278,701	45,744,000	226,511,000	8,109,000	68,202,000	590,000	19,062,000	20,474,000	710,510,000	-	2,512,254,701
FY2013	1,379,089,000	11,682,390	41,922,000	210,316,000	6,992,000	81,186,000	4,354,000	14,615,000	18,770,000	667,857,838	-	2,436,784,228
FY2014	1,407,476,000	11,648,000	37,093,000	213,710,000	7,022,000	60,425,000	16,033,000	11,467,000	19,692,000	704,066,000	-	2,488,632,000
WATER Forecast Volume												
TY 2016	1,438,776,700	11,650,782	38,569,189	217,508,642	7,568,393	69,940,189	19,840,915	10,409,330	19,719,204	686,087,724	-	2,520,071,068
2017	1,467,471,303	11,621,655	38,472,766	227,655,893	7,946,813	71,426,418	21,313,721	10,855,275	20,398,421	684,372,505	-	2,561,534,770
2018	1,512,108,111	11,975,156	39,643,011	239,008,808	8,188,535	73,599,031	21,962,031	11,185,465	21,018,890	705,189,406	-	2,643,878,446
2019	1,558,102,660	12,339,411	40,848,853	250,927,879	8,437,610	75,837,730	22,630,062	11,525,699	21,658,232	726,639,504	-	2,728,947,639
2020	1,605,496,247	12,714,745	42,091,373	263,441,338	8,694,261	78,144,524	23,318,411	11,876,282	22,317,021	748,742,062	-	2,816,836,264
2021	1,658,477,624	13,134,331	43,480,388	277,272,009	8,981,171	80,723,293	24,087,919	12,268,199	23,053,483	773,450,550	-	2,914,928,967
2022	1,713,207,385	13,567,764	44,915,241	291,828,789	9,277,550	83,387,162	24,882,820	12,673,050	23,814,248	798,974,418	-	3,016,528,427
2023	1,769,743,229	14,015,500	46,397,444	307,149,800	9,583,709	86,138,938	25,703,953	13,091,261	24,600,118	825,340,573	-	3,121,764,527
2024	1,828,144,755	14,478,012	47,928,559	323,275,165	9,899,972	88,981,523	26,552,184	13,523,272	25,411,922	852,576,812	-	3,230,772,177
2025	1,888,473,532	14,955,786	49,510,202	340,247,111	10,226,671	91,917,913	27,428,406	13,969,540	26,250,516	880,711,847	-	3,343,691,525

CHART II-7



Peaking Factors

The cost of providing water to customers depends not only on the amount of water each class uses, but also on how that usage occurs over time. The maximum-day and maximum-hour peaking requirements of a water utility's customers are an important influence on the utility's costs. Because water utilities attempt to meet all of the demands of their customers, water systems are sized to meet customers' peak requirements. Therefore, during off-peak periods, there are usually significant costs associated with the unused capacity of the system. These costs must be allocated to customers in proportion to the contribution of each customer class to the system peak, in order to develop equitable cost-based rates. Thus, it is necessary to determine the peak rate of use relative to the average rate of use for each class. This ratio is called a *Peaking Factor*.

The consumption data by class provided by the City was utilized in the rate model to calculate the peak day factor and peaking factors for individual rate classes.

The calculation of peaking factors for individual classes relies on available pumping and consumption information as well as professional judgment. If customer meters could record daily flow rates for each customer, more refined information could be obtained on peaking factors. This is not feasible because of the enormous cost that would be imposed on the utility. Therefore, it is an accepted practice in the water industry to develop peaking factor estimates based on standard formulas using system peak day information and monthly customer class usage records. This is a conservative methodology, since customer class peaking factors based on peak months will inevitably be lower than the system-wide peaking factor, which is based on the peak day.

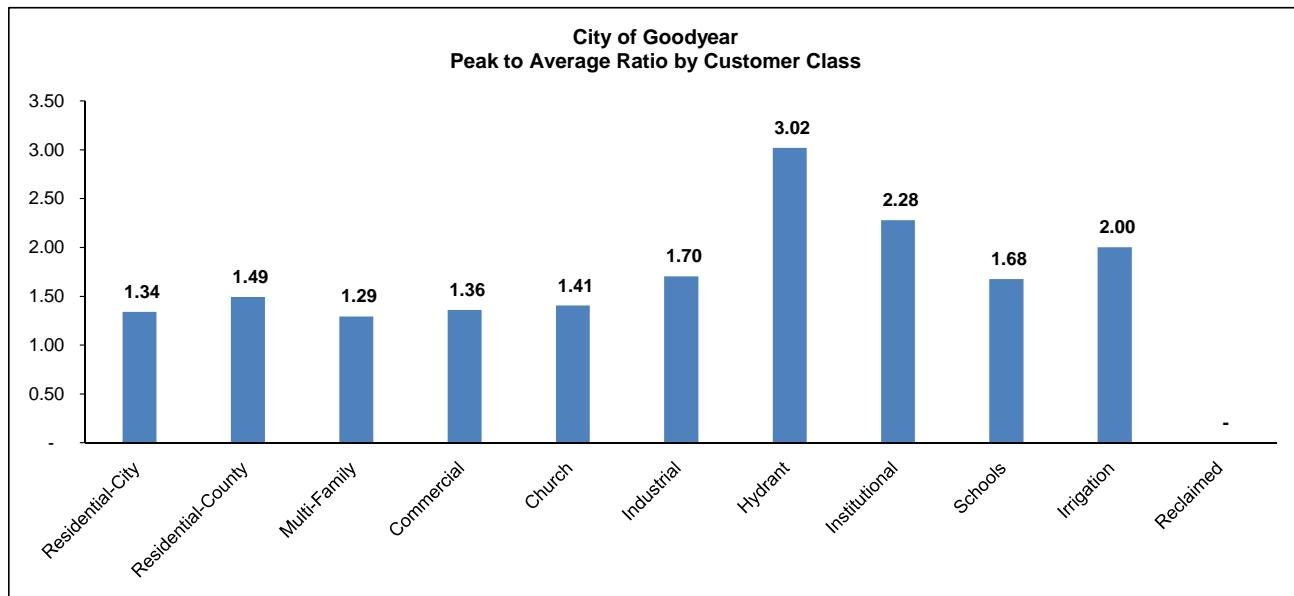
Based on AWWA guidelines, the customer class peaking factors calculated in this study are for non-coincidental peaks. The peaking factors developed for this analysis are based on actual monthly water consumption by customer class for the forecast period based on averaged historical consumption. The calculations of the peaking factors by class are presented graphically in **Table II-8**.

Table II-8

Previous 12 Months Water Consumption and Peak to Average Ratios													
	Residential-City	Residential-County	Multi-Family	Commercial	Church	Industrial	Hydrant	Institutional	Schools	Irrigation	Reclaimed	Total	
Jan-14	108,972,000	857,000	2,974,000	17,202,000	503,000	3,380,000	1,080,000	577,000	946,000	27,208,000	-	163,699,000	
Feb-14	87,754,000	708,000	2,634,000	14,277,000	315,000	2,893,000	2,238,000	433,000	1,113,000	23,620,000	-	135,985,000	
Mar-14	90,657,000	759,000	2,664,000	14,926,000	427,000	3,671,000	1,908,000	581,000	1,283,000	25,164,000	-	142,040,000	
Apr-14	106,070,000	945,000	3,463,000	21,016,000	417,000	4,730,000	2,139,000	857,000	1,465,000	42,319,000	-	183,421,000	
May-14	139,248,000	929,000	2,911,000	16,042,000	520,000	5,291,000	4,922,000	985,000	1,673,000	51,769,000	-	224,290,000	
Jun-14	127,762,000	1,112,000	2,919,000	17,419,000	603,000	6,249,000	1,845,000	1,040,000	1,559,000	70,875,000	-	231,383,000	
Jul-14	142,240,000	1,428,000	4,100,000	24,315,000	874,000	9,789,000	888,000	1,948,000	1,676,000	112,819,000	-	300,087,000	
Aug-14	158,632,000	1,060,000	3,359,000	19,293,000	841,000	8,145,000	563,000	800,000	1,930,000	92,747,000	-	287,370,000	
Sep-14	120,340,000	902,000	3,208,000	17,825,000	862,000	6,785,000	972,000	987,000	2,219,000	70,529,000	-	224,629,000	
Oct-14	132,193,000	970,000	3,985,000	20,184,000	829,000	7,387,000	1,346,000	903,000	2,716,000	63,472,000	-	233,985,000	
Nov-14	107,380,000	903,000	2,933,000	16,114,000	830,000	6,215,000	906,000	641,000	1,450,000	54,300,000	-	191,672,000	
Dec-14	97,303,000	914,000	2,877,000	15,838,000	441,000	4,422,000	745,000	511,000	1,412,000	41,621,000	-	166,084,000	
Total	1,418,551,000	11,487,000	38,027,000	214,451,000	7,462,000	68,957,000	19,562,000	10,263,000	19,442,000	676,443,000	-	2,484,645,000	
Peak Month	158,632,000	1,428,000	4,100,000	24,315,000	874,000	9,789,000	4,922,000	1,948,000	2,716,000	112,819,000	-	300,087,000	
Monthly Average	118,212,583	957,250	3,168,917	17,870,917	621,833	5,746,417	1,630,167	855,250	1,620,167	56,370,250	-	207,053,750	
Peak / Avg. Ratio	1.34	1.49	1.29	1.36	1.41	1.70	3.02	2.28	1.68	2.00			
Total Accounts	15,363	88	36	328	18	41	12	21	26	403	-	16,336	
Avg. Usage (Gallons)	7,695	10,878	88,025	54,485	34,546	140,157	135,847	40,726	62,314	139,877	-	12,675	

A general ratemaking rule is that the higher the peak to average ratio, the higher the unit cost of service for a given customer class. While this is not an absolute rule, it is a good general indicator as to which customer classes are incurring the greatest costs to provide service. This principle will be examined more thoroughly in Section III. **Chart II-9** shows peak to average ratio by customer class.

Chart II-9



The chart reveals that the highest peak to average ratios are for the Hydrant customer class. The greater cost of service applied to these types of accounts is directly linked to the cost borne by the utility to maintain the capacity to serve these accounts at high demand levels which may fluctuate erratically.

Historical and Forecast Wastewater Flows

As with billed water consumption, the project team prepared a ten year forecast of wastewater billing units. Residential City and County customers are billed based on winter average water usage. Effluent and Perryville Prison wastewater is billed on 100% of water usage and all other customer classes are billed on 80% of water usage. Since individual wastewater usage is not metered, it is derived from the water consumption figures for each customer class. The billing unit forecast is derived using anticipated account growth as depicted in Table II-4. The results of the forecast are presented in Table II-10.

Two points are notable about this table. First, as with water, these billing units are forecast based on the growth of wastewater accounts and anticipated consumption ratios built into the rate model. These units and ratios were estimated from growth projections of City staff. Secondly, wastewater usage is not subject to the significant fluctuations experienced by water accounts. This is because the water volume fluctuation is largely due to outdoor usage that is not returned to the wastewater system.

The table reveals that wastewater billing units are forecast to increase by an annual average of 3.37% over the forecast period.

TABLE II-10

CITY OF GOODYEAR											
FORECAST WASTEWATER BILLING UNITS WASTEWATER Customer Classes											
Residential-City	Residential-County	Multi-Family	Commercial	Church	Industrial	Effluent	Institutional	School	Perryville Prison	Total	
WASTEWATER Historical Volume											
FY 2012	951,010,230	316,530	36,707,710	176,801,600	6,487,050	41,714,800	47,315,000	12,046,660	16,215,010	133,761,437	1,422,376,027
FY 2013	954,520,850	325,470	33,424,420	164,010,810	5,330,870	56,376,210	35,165,000	11,199,870	13,825,580	183,114,620	1,457,293,700
FY 2014	963,293,050	309,500	29,753,600	164,907,600	5,539,600	42,324,600	30,085,000	8,375,400	15,800,800	213,995,030	1,474,384,180
WASTEWATER Forecast Volume											
2016	1,044,151,787	241,339	31,215,604	171,365,472	6,125,407	49,228,174	30,477,222	8,424,691	15,959,549	213,174,594	1,570,363,839
2017	1,074,014,529	241,339	31,215,604	178,097,687	6,465,707	51,051,439	30,477,222	8,920,262	17,141,738	213,174,594	1,610,800,120
2018	1,109,457,008	249,303	32,245,719	187,447,816	6,679,075	52,736,137	30,477,222	9,214,630	17,707,415	220,209,356	1,666,423,680
2019	1,146,069,089	257,530	33,309,827	197,288,826	6,899,485	54,476,429	30,477,222	9,518,713	18,291,760	227,476,264	1,724,065,146
2020	1,183,889,369	266,028	34,409,052	207,646,490	7,127,168	56,274,151	30,477,222	9,832,830	18,895,388	234,982,981	1,783,800,680
2021	1,222,957,718	274,807	35,544,550	218,547,930	7,362,364	58,131,198	30,477,222	10,157,314	19,518,936	242,737,419	1,845,709,460
2022	1,263,315,323	283,876	36,717,521	230,021,697	7,605,322	60,049,528	30,477,222	10,492,505	20,163,061	250,747,754	1,909,873,809
2023	1,305,004,729	293,244	37,929,199	242,097,836	7,856,298	62,031,162	30,477,222	10,838,758	20,828,442	259,022,430	1,976,379,319
2024	1,348,069,885	302,921	39,180,862	254,807,972	8,115,556	64,078,191	30,477,222	11,196,437	21,515,780	267,570,170	2,045,314,996
2025	1,392,556,191	312,917	40,473,831	268,185,391	8,383,369	66,192,771	30,477,222	11,565,919	22,225,801	276,399,986	2,116,773,398



Section III

SECTION III

Water & Wastewater Forecast Revenue Requirement



In this section of the water and wastewater rate study and long-term financial plan, the City's test year and forecast water and wastewater utility revenue requirements are developed. The test year consists of the City's fiscal year, July 1, 2015 through June 30, 2016.

The estimates presented in this section are based on the City's water and wastewater budgets for FY 2016, as well as a forecast of the City's future capital improvements and debt obligations.

The City's water and wastewater utilities are enterprise funds, and as such, are financed solely through

related rates and fees. The calculation of a revenue requirement differs from a utility's budget in that it represents only that amount that must be raised through the City's user rates. This means that non-rate revenue (such as connection fees, late payment charges and interest) must be subtracted from the budgeted operating and capital expenditures to determine the net revenue requirement to be raised from rates. These non-rate revenues will be discussed in detail in Section V of this report.

As is typical for publicly owned utilities, Goodyear's system revenue requirements were developed using the cash basis of ratemaking. Under the cash basis, as defined by the AWWA Manual M-1, system revenue requirements consist of cash expenditures and other financial commitments (such as debt service coverage or reserves) that must be met through system operating revenues and other revenue sources.

The following specific items are included in the City's revenue requirements raised from rates:

Operating Expenses

Operating Transfers

Capital Outlays Funded from Rates

Debt service -- Current

Debt Service – Forecast

All data used in the development of the revenue requirements was obtained from the financial statements, budgets and other information provided by the City. Detailed calculations are presented in the rate model contained in Appendix A of this report. For rate design purposes, revenue requirements are developed separately for the water and wastewater systems.

The assumptions utilized in this forecast will be thoroughly detailed in this section of the report. These assumptions, particularly those associated with the City's capital expenditure budget, are critical to the development of both the revenue requirement and the ultimate rate recommendations. The project team discussed these assumptions with City staff and considers all to be consistent with staff recommendations.

As the first step of this section, the current and forecast Operating Costs, Capital Outlays and Debt Service will be examined. Non-rate revenues will be subtracted from the total to yield the net revenue requirement.

Budgeted expenditures for the City's water and wastewater operations are reflected in City's Fund 421 - Wastewater (Sewer) Fund Summary and Fund 411 - Water Fund Summary and FY 2016 budget documents.

Operating Expenses and Capital Outlays – Test Year

Table III-1 summarizes the test year FY 2016 operating costs and capital outlays net of transfers and debt service for City of Buckeye. **Table III-2 and Table III-3** on the following pages present the FY 2016 water and wastewater operating budgets in detail by line item. These totals are derived from City's FY 2016 budget.

TABLE III-1

CITY OF GOODYEAR		
TEST YEAR OPERATING EXPENSES		
	FY 2016 Budget	FY 2016 Budget
WATER & WASTEWATER OPERATING EXPENDITURES		
Water Operating Expense		Wastewater Operating Expense
CAP Water Costs	\$ 1,012,000	5210 -- Administration \$ 317,493
5110 -- Administration	1,004,933	5220 -- Collection System 913,327
5120 -- Distribution	1,516,434	5254 -- Environmental Quality 450,369
5130 -- Production	2,712,371	Other Collection Expense -
5140 -- Water Quality	260,679	Other Collection Expense -
Water Maintenance (New Cost Center-SAP)	232,615	5251 -- Corgett WWTP 613,514
5150 -- Water Resource	702,702	5252 -- Goodyear WWTP 1,400,575
One Time Supplements	<u>218,950</u>	5253 -- Rainbow Valley WWTP 524,776
Total Water Operating Expenses	\$ 7,660,684	Total WW Operating Expenses \$ 4,220,053
Capital Outlays		Capital Outlays
Capital Outlays	\$ 907,353	Capital Outlays \$ 1,208,369
Supplements -- Capital Outlays	<u>-</u>	Supplements -- Capital Outlays -
Total Capital Outlays	\$ 907,353	Total Capital Outlays \$ 1,208,369
Net Water Budget	\$ 8,568,037	Net Wastewater Budget \$ 5,428,422
TOTAL WATER AND WASTEWATER OPERATING EXPENSES AND CAPITAL OUTLAYS \$ 13,996,459		

As the Table III-1 shows, total operating costs in the test year are **\$13,996,459**, of which \$8,568,037 is for the water utility and \$5,428,422 is for the wastewater utility. Debt Service payments for principal and interest were subtracted from Operating expenses and will be included separately in the Debt Service expense section. Minor debt administration expenses were retained in the water and wastewater operating expenses.

The following is notable about the operating expenses shown:

- Operating Expenses capture the primary operating costs associated with the day to day management of the water and wastewater utility.
- The City's Water Operating Budget is comprised of 6 functional areas: Administration, Distribution, Production, Water Quality, Water Maintenance, and Water Resources.
- The City's Wastewater Operating Budget is comprised of 4 functional areas: Administration, Collection System, Environmental Quality, and Treatment.
- Expenses in each functional area are then separated into four expense categories: Personnel, Contractual Services, Commodities, and Capital Outlays.
- Personnel Services include salaries, benefits and insurance for the water and wastewater utility staff. Allocations and projected additions of personnel to the functional areas of the utility were made based on input from Utility staff in order to allocate personnel costs.
- Contractual Services expenditures include costs for utilities, maintenance services, professional consulting fees, laboratory fees, City's attorney and other contractual service providers plus charges for dues, memberships, training and special permit fees.
- Commodities expenditures cover those costs as they relate to utility assets including, but not limited to, utilities, automotive costs, general office supplies, computer hardware and software, chemicals, water purchases, generators, meters, and maintenance expenditures for wells, booster pumps and treatment facilities.
- "Transfers Out" to the City's General Fund for general overhead reimbursement for services such as human resources, finance and payroll, etc. are listed separately in both the Water and Wastewater budgets. These are expected to remain constant throughout the forecast period.
- Capital Outlays include capital equipment and project expenditures not listed in the Capital Improvement Plan ("CIP"), lower cost items such as vehicles, pumps, and expenditures for the following:
 - Water and Wastewater Line Impact Fee Credits –these are payments due to developers
 - Water and Wastewater Line Oversizing – these are costs for increasing line sizes as City expands an new capacity and facilities are needed
 - Water Main Repair and Replacement
 - One time Supplements and Ongoing Supplements – these are requested expenditures that are not included in the base budget, but are either one time projects or expenses expected to increase annually which are reviewed and given consideration on an ongoing basis.

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M											
	Test Year Total Budget	Test Year Total Water	Adjustments	Forecast Increase in: 2017 2018	2019	2020	2021	2022	2023	2024	2025
1 BEGINNING FUND BALANCE											
Water <u>Beginning of Year Fund Balance</u>	\$ 1,693,009	\$ -									
2 NON-RATE REVENUES											
Water Water Sales	\$ 11,639,157	\$ (11,639,157)	\$ -	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Penalties	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Connection Fees	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Disconnect Notices	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Meter Reads/Installs	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Returned Checks	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cross Connection Fees	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Fees - Aggregated	559,108	559,108	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Miscellaneous Other	815,566	815,566	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Transfer in Impact fees (for debt Capital Contributed from Develop	(314,101)	(314,101)	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Capital Contributed from Develop	834,289	834,289	-	-	-100.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Fireline Fees (from Revenue)	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Revenue	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Total	14,162,221	(11,953,258)			2,208,963						

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M													
Test Year			Forecast Increase in:										
	Total	Water	Budget	Adjustments	2017	2018	2019	2020	2021	2022	2023	2024	2025
3A 5110 – Administration													
Personnel	\$ 180,045	\$ -	\$ 180,045	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Regular Full Time	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Regular Part Time	1,000	1,000	1,000	1,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Longevity Pay	23,750	23,750	23,750	23,750	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Health Ins-City	1,146	1,146	1,146	1,146	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Dental Ins-City	252	252	252	252	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Life Insurance-City	17,131	17,131	17,131	17,131	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
ASRS Retirement-City	9,481	9,481	9,481	9,481	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Social Security-City	2,239	2,239	2,239	2,239	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Medicare-City	-	-	-	-	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Unemployment	2,215	2,215	2,215	2,215	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Workers Comp	-	-	-	-	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Medical Examinations	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Employee Awards	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Personnel	\$ 237,259	\$ -	\$ 237,259	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M											
	Test Year Total Budget	Test Year Total Water	Forecast 2017	Increase in: 2018	2019	2020	2021	2022	2023	2024	2025
Contractual Services											
Pre Employment Charges	\$ 500	\$ -	\$ 500	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Grant Match Funds	\$ 75,000	\$ -	\$ 75,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Other Professional Services	\$ 480	\$ -	\$ 480	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Internet Services	\$ 48,000	\$ -	\$ 48,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Credit Card Services	\$ 8,000	\$ -	\$ 8,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Uniform Maintenance	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Collection/Enforcement	\$ -	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Permitting Fees	\$ 500	\$ -	\$ 500	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Recruitment Advertising	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Other Advertising	\$ 1,000	\$ -	\$ 1,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Custom Printed Forms	\$ 3,000	\$ -	\$ 3,000	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
Water	\$ 50,000	\$ 9,65%	\$ 50,000	9.65%	11.21%	11.22%	11.22%	11.22%	11.22%	11.49%	11.50%
Electricity	\$ 4,000	\$ -	\$ 4,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Telephone	\$ 19,660	\$ -	\$ 19,660	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cellphone	\$ 800	\$ -	\$ 800	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Building Maintenance	\$ 2,550	\$ -	\$ 2,550	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Vehicle Repairs Labor	\$ 3,150	\$ -	\$ 3,150	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Citywide Vehicle Parts	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Hardware Maint	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Per Diem (Meals)	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Lodging	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Mileage Reimbursement	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Per Diem (Meals)	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Lodging	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Transportation	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Dues and Memberships	\$ 2,800	\$ -	\$ 2,800	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Seminars and Conferences	\$ 4,000	\$ -	\$ 4,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Meeting Expenses	\$ 1,000	\$ -	\$ 1,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Employee Training/Develop	\$ 15,250	\$ -	\$ 15,250	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Contractual Services	\$ 239,690	\$ -	\$ 239,690	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

		Test Year		Forecast Increase in:		2017	2018	2019	2020	2021	2022	2023	2024	2025
		Total	Water	Budget	Adjustments									
Commodities		\$ 2,180	\$ 1,000	\$ -	\$ -	\$ 2,180	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Office Supplies		1,000	-	1,000	-	1,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Awards and Indemnities		-	-	-	-	-	-	-	-	-	-	-	-	-
Specialty Supplies		-	-	-	-	1,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Software		1,000	-	1,000	-	1,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Equip < 5,000		1,500	-	1,500	-	1,500	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Safety Supplies		7,500	-	7,500	-	7,500	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Minor Equipment		500	-	500	-	500	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Postage		1,000	-	1,000	-	1,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Other General Supplies		2,500	-	2,500	-	2,500	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Gasoline		3,000	-	3,000	-	3,000	10.25%	11.34%	11.34%	11.34%	11.34%	11.34%	11.35%	11.35%
Diesel		-	-	-	-	-	-	-	-	-	-	-	-	-
Car Wash		100	-	100	-	100	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Prior Period Adjustment		-	-	-	-	-	-	-	-	-	-	-	-	-
Vehicles		443,434	-	443,434	-	443,434	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Equip < 1,000		64,270	-	64,270	-	64,270	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense		-	-	-	-	-	-	-	-	-	-	-	-	-
Commodities		\$ 527,984	\$ -	\$ -	\$ -	\$ 527,984								
Total		\$ 1,004,933	\$ -	\$ -	\$ -	\$ 1,004,933								
3B 5120 -- Distribution														
Personnel														
Regular Full Time		\$ 479,840	\$ 13,000	\$ -	\$ -	\$ 479,840	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%	8.26%
On Cal Pay		11,500	-	11,500	-	11,500	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%	8.26%
Standby Pay		12,000	-	12,000	-	12,000	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%	8.26%
Overtime Pay		-	-	-	-	-	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%	8.26%
Premium/Holiday Pay		-	-	-	-	-	5,200	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%
Longevity Pay		-	-	-	-	-	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%	8.26%
Severence Pay Off		-	-	-	-	-	135,000	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%
Health Ins-City		135,000	-	135,000	-	6,516	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%
Dental Ins-City		6,516	-	6,516	-	1,431	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%
Life Insurance-City		-	-	-	-	-	-	-	-	-	-	-	-	-

	Test Year Total Budget	Adjustments	Test Year Total Water	Forecast Increase in:					2023	2024	2025
				2017	2018	2019	2020	2021			
CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M											
Disability Ins -- Short Term	-	-	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%	19.00%
ASRS Retirement-City	52,877	52,877	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%	19.00%
Social Security-City	30,352	30,352	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%	19.00%
Medicare-City	6,925	6,925	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%	19.00%
State Unemployment	-	-	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%	19.00%
Workers Comp	14,731	14,731	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%	19.00%
Medical Examinations	-	-	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%	19.00%
Employee Awards	-	-	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%	8.26%	13.00%
Retirement Health Savings	-	-	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%	8.26%	13.00%
Other Employee Benefits	-	-	31.22%	27.18%	27.18%	32.08%	15.25%	14.88%	14.56%	14.26%	19.00%
Expense	-	-	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%	8.26%	13.00%
Expense	-	-	25.22%	21.18%	21.18%	26.08%	9.25%	8.88%	8.56%	8.26%	13.00%
Personnel	\$ 769,372	\$ -	\$ 769,372								
Contractual Services											
Pre Employment Charges	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Credit Card Services	-	-	-	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Custom Printed Forms	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Telephone	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
General Equipment Maintenance	-	-	-	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Vehicle Repairs Labor	19,000	19,000	19,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Citywide Vehicle Parts	23,000	23,000	23,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Software maintenance	4,000	4,000	4,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Water Main Repairs	45,079	45,079	9,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Hydrant/Valve Maintenance	156,093	156,093	156,093	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Hydrant/Valve Maintenance	-	-	-	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Water Meter Maintenance	10,847	10,847	10,847	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Water Meter Maintenance	-	-	-	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Meeting Expenses	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Employee Training/Development	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Contractual Services	\$ 258,019	\$ (36,079)	\$ 221,940								

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M											
	Test Year Total Budget	Test Year Total Water	Forecast 2017	Increase in: 2018	2019	2020	2021	2022	2023	2024	2025
Commodities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office Supplies	\$ -	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Equip < 5,000	\$ -	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Shop Supplies	\$ 94,819	\$ -	\$ 94,819	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Minor Equipment	\$ -	\$ -	\$ 5,25%	\$ 6,34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Minor Equipment	\$ -	\$ -	\$ 5,25%	\$ 6,34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Water Meters	\$ 159,000	\$ -	\$ 159,000	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
NEW_Water Meters	\$ 229,103	\$ -	\$ 229,103	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
NEW-Hydrant/Valve Repair Par	\$ -	\$ -	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Other General Supplies	\$ 33,000	\$ -	\$ 33,000	\$ 10,25%	11.34%	11.34%	11.34%	11.34%	11.34%	11.35%	11.35%
Gasoline	\$ 9,200	\$ -	\$ 9,200	\$ 10,25%	11.34%	11.34%	11.34%	11.34%	11.34%	11.35%	11.35%
Diesel	\$ -	\$ -	\$ -	\$ 5,25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Car Wash	\$ -	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Commodities	\$ 525,122	\$ -	\$ -	\$ -	\$ 525,122	\$ 525,122	\$ 525,122	\$ 525,122	\$ 525,122	\$ 525,122	\$ 525,122
Total	\$ 1,552,513	\$ -	\$ -	\$ (36,079)	\$ 1,516,434	\$ 1,516,434	\$ 1,516,434	\$ 1,516,434	\$ 1,516,434	\$ 1,516,434	\$ 1,516,434
5130 -- Production											
Personnel	\$ 367,846	\$ 10,000	\$ 10,000	\$ 12,132	\$ 15,000	\$ 28,00%	\$ 23,00%	\$ 28,00%	\$ 28,00%	\$ 3,00%	\$ 3,00%
Regular Full Time	\$ 367,846	\$ 10,000	\$ 10,000	\$ 12,132	\$ 15,000	\$ 28,00%	\$ 23,00%	\$ 28,00%	\$ 28,00%	\$ 3,00%	\$ 3,00%
On Call Pay	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,00%	\$ 23,00%	\$ 28,00%	\$ 28,00%	\$ 3,00%	\$ 3,00%
Standby Pay	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,00%	\$ 23,00%	\$ 28,00%	\$ 28,00%	\$ 3,00%	\$ 3,00%
Overtime Pay	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,00%	\$ 23,00%	\$ 28,00%	\$ 28,00%	\$ 3,00%	\$ 3,00%
Premium/Holiday Pay	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,00%	\$ 23,00%	\$ 28,00%	\$ 28,00%	\$ 3,00%	\$ 3,00%
Longevity Pay	\$ 4,200	\$ -	\$ 4,200	\$ -	\$ 105,000	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
Health Ins-City	\$ 105,000	\$ -	\$ 105,000	\$ -	\$ 5,068	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
Dental Ins-City	\$ 5,068	\$ -	\$ 5,068	\$ -	\$ 1,113	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
Life Insurance-City	\$ 1,113	\$ -	\$ 1,113	\$ -	\$ -	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
Disability Ins -- Short Term	\$ -	\$ -	\$ -	\$ -	\$ 40,730	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
SRS Retirement-City	\$ 40,730	\$ -	\$ 40,730	\$ -	\$ 22,806	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
Social Security-City	\$ 22,806	\$ -	\$ 22,806	\$ -	\$ 5,334	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
Medicare-City	\$ 5,334	\$ -	\$ 5,334	\$ -	\$ 11,458	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
Workers Comp	\$ 11,458	\$ -	\$ 11,458	\$ -	\$ -	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
Medical Examinations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,00%	\$ 23,00%	\$ 28,00%	\$ 28,00%	\$ 3,00%	\$ 3,00%
Uniform Allowance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,00%	\$ 23,00%	\$ 28,00%	\$ 28,00%	\$ 3,00%	\$ 3,00%
Employee Awards	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,00%	\$ 29,00%	\$ 34,00%	\$ 34,00%	\$ 3,00%	\$ 3,00%
Retirement Health Savings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,00%	\$ 9,00%

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M												
Test Year	Test Year			Forecast Increase in:								
	Total	Budget	Adjustments	2017	2018	2019	2020	2021	2022	2023	2024	2025
Other Employee Benefits	-	-	-	34.00%	29.00%	34.00%	9.00%	9.00%	9.00%	9.00%	15.67%	9.00%

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M									
	Test Year	Total	Water	Adjustments	Forecast	Increase in:	2017	2018	2019
	Budget						2020	2021	2022
Expense	-	-	-	-	28.00%	23.00%	28.00%	3.00%	3.00%
Expense	-	-	-	-	28.00%	23.00%	28.00%	3.00%	3.00%
Expense	-	-	-	-	28.00%	23.00%	28.00%	3.00%	3.00%
Personnel	\$ 600,687	\$ -	\$ 600,687	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%
Contractual Services									
Pre Employment Charges	\$ 30,000	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%
Security Services	1,000	-	30,000	30,000	3.00%	3.00%	3.00%	3.00%	3.00%
Consulting Fees	-	-	1,000	1,000	3.00%	3.00%	3.00%	3.00%	3.00%
Water	375,000	-	375,000	10,25%	11.34%	11.34%	11.34%	11.34%	11.34%
Water Charges	684	-	684	10,25%	11.34%	11.34%	11.34%	11.34%	11.34%
Natural Gas	770,000	-	770,000	10,25%	11.34%	11.34%	11.34%	11.34%	11.34%
Electricity	40,000	-	40,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Telephone	2,500	-	2,500	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Refuse	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Improvements Repairs/Maint	195,000	-	195,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%
General Equipment Maintenance	15,000	-	15,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%
Vehicle Repairs Labor	15,000	-	15,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%
Citywide Vehicle Parts	10,000	-	10,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Hardware Main	10,000	-	10,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Software Maint	20,000	-	20,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%
Plant Equip Maint	20,000	-	20,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%
Storage Tank Maintenance	2,500	-	2,500	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%
Equipment Rentals	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Meeting Expenses	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Employee Training/Develop	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Contractual Services	\$ 1,506,684	\$ -	\$ 1,506,684	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%
Commodities									
Office Supplies	\$ 5,000	\$ -	\$ 5,000	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Equip < 5,000	135,000	-	135,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%
Minor Equip	(5,385)	55,385	50,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%
Misc. Non Inventory	20,000	-	20,000	10,25%	11.34%	11.34%	11.34%	11.34%	11.34%
Gasoline	15,000	-	15,000	10,25%	11.34%	11.34%	11.34%	11.34%	11.34%
Diesel	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Car Wash	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Chemical Products	380,000	-	380,000	10,25%	11.34%	11.34%	11.34%	11.34%	11.34%
Plant Equipment	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Vehicles	-	-	-	823.82%	-40.40%	-58.90%	286.66%	-29.83%	3.00%
IT	0	0	0	#####	-34.86%	0.00%	-36.34%	341.01%	3.00%
	610,385	\$ (5,385)	\$ 605,000						

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M											
	Test Year Total Budget	Test Year Total Water	Forecast Increase in: 2017	2018	2019	2020	2021	2022	2023	2024	2025
<u>Capital Outlays</u>											
Wells	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Pumping Equipment	\$ 53,220	\$ (53,220)	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Plant Equipment			-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense			-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense			-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Capital Outlays	\$ 53,220	\$ (53,220)	\$ -								
Total	\$ 2,770,976	\$ (58,605)	\$ 2,712,371								
5140 -- Water Quality											
<u>Personnel</u>											
Regular Full Time	\$ 89,873	\$ -	\$ 89,873	3.00%	3.00%	103.00%	3.00%	3.00%	53.00%	3.00%	3.00%
On Call Pay			-	3.00%	3.00%	103.00%	3.00%	3.00%	53.00%	3.00%	3.00%
Standby Pay			-	3.00%	3.00%	103.00%	3.00%	3.00%	53.00%	3.00%	3.00%
Overtime Pay			-	3.00%	3.00%	103.00%	3.00%	3.00%	53.00%	3.00%	3.00%
Longevity Pay			-	3.00%	3.00%	103.00%	3.00%	3.00%	53.00%	3.00%	3.00%
Health Ins-City	\$ 30,000	\$ 9,000	\$ 9,000	9.00%	9.00%	109.00%	9.00%	9.00%	59.00%	9.00%	9.00%
Dental Ins-City	\$ 1,448	\$ 9,000	\$ 9,000	9.00%	9.00%	109.00%	9.00%	9.00%	59.00%	9.00%	9.00%
Life Insurance-City	\$ 318	\$ 9,000	\$ 9,000	9.00%	9.00%	109.00%	9.00%	9.00%	59.00%	9.00%	9.00%
Disability Ins -- Short Term			-	9.00%	9.00%	109.00%	9.00%	9.00%	59.00%	9.00%	9.00%
SRSS Retirement-City	\$ 9,951	\$ 9,000	\$ 9,000	9.00%	9.00%	109.00%	9.00%	9.00%	59.00%	9.00%	9.00%
Social Security-City	\$ 5,572	\$ 9,000	\$ 9,000	9.00%	9.00%	109.00%	9.00%	9.00%	59.00%	9.00%	9.00%
Medicare-City	\$ 1,303	\$ 9,000	\$ 9,000	9.00%	9.00%	109.00%	9.00%	9.00%	59.00%	9.00%	9.00%
Workers Comp	\$ 3,274	\$ 9,000	\$ 9,000	9.00%	9.00%	109.00%	9.00%	9.00%	59.00%	9.00%	9.00%
Employee Awards			-	3.00%	3.00%	103.00%	3.00%	3.00%	53.00%	3.00%	3.00%
Retirement Health Savings			-	9.00%	9.00%	109.00%	9.00%	9.00%	59.00%	9.00%	9.00%
Expense			-	3.00%	3.00%	103.00%	3.00%	3.00%	53.00%	3.00%	3.00%
Expense			-	3.00%	3.00%	103.00%	3.00%	3.00%	53.00%	3.00%	3.00%
Expense			-	3.00%	3.00%	103.00%	3.00%	3.00%	53.00%	3.00%	3.00%
Personnel	\$ 141,739	\$ -	\$ 141,739								
<u>Contractual Services</u>											
Uniform Maintenance	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Laboratory Services	\$ 69,600	\$ 4,65% 19,860	\$ 69,600 4,65%	6.21%	6.22%	6.22%	6.22%	6.22%	6.48%	6.49%	6.49%
Permitting Fees				6.21%	6.22%	6.34%	6.34%	6.34%	6.48%	6.49%	6.49%
Customer Printed Forms	\$ 6,500	\$ 5.25% 1,200	\$ 6,500 1,200	6.34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Vehicle Repairs Labor				6.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Citywide Vehicle Parts	\$ 600	\$ 5.25% 680	\$ 600 680	6.34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Software Maintenance				3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

	Test Year Total Budget	Adjustments	Test Year Total Water	Forecast Increase in:					2024
				2017	2018	2019	2020	2021	
CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M									
Per Diem (Meals)	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Seminars and Conferences	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Employee Training/Developer Expense	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense Expense	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Contractual Services	\$ 98,440	\$ -	\$ 98,440						
Commodities									
Office Supplies	\$ -	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Shop Supplies	15,000	-	15,000	5.25%	6.34%	6.34%	6.34%	6.34%	6.35%
Laboratory Supplies	-	-	-	5.25%	6.34%	6.34%	6.34%	6.34%	6.35%
Safety Supplies	500	-	500	5.25%	6.34%	6.34%	6.34%	6.34%	6.35%
Minor Equipment	-	-	-	5.25%	6.34%	6.34%	6.34%	6.34%	6.35%
Postage	5,000	-	5,000	10.25%	11.34%	11.34%	11.34%	11.34%	11.35%
Gasoline	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Car Wash	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Commodities	\$ 20,500	\$ -	\$ 20,500						
Total	\$ 260,679	\$ -	\$ 260,679						
Water Maintenance									
Personnel									
Regular Full Time	\$ 151,087	\$ 1,500	\$ 151,087	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Longevity Pay	-	-	1,500	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Health Ins-City	45,000	-	45,000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Dental Ins-City	2,172	-	2,172	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Life Insurance-City	477	-	477	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
ASRS Retirement-City	16,729	-	16,729	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Social Security-City	9,367	-	9,367	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Medicare-City	2,191	-	2,191	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Unemployment	-	-	-	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Workers Comp	4,092	-	4,092	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Medical Examinations	-	-	-	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Employee Awards	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Personnel	\$ 232,615	\$ -	\$ 232,615						

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M											
	Test Year Total Budget	Test Year Water	Forecast 2017	Increase in: 2018	2019	2020	2021	2022	2023	2024	2025
Contractual Services	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Pre Employment Charges	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Legal Services	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Other Professional Services	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Other Professional Services	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Credit Card Services	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Uniform Maintenance	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Collection/Enforcement	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Permitting Fees	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Permitting Fees	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Custom Printed Forms	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Water Charges	\$ -	\$ -	10.25%	11.34%	11.34%	11.34%	11.34%	11.34%	11.34%	11.35%	11.35%
Water Charges	\$ -	\$ -	10.25%	11.34%	11.34%	11.34%	11.34%	11.34%	11.34%	11.35%	11.35%
Electricity	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Telephone	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cellphone	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Building Maintenance	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Vehicle Repairs Labor	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Citywide Vehicle Parts	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%
Per Diem (Meals)	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Lodging	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Mileage Reimbursement	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Per Diem (Meals)	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Lodging	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Transportation	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Dues and Memberships	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Seminars and Conferences	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Meeting Expense	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Employee Training/Developer Expense	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Contractual Services	\$ -	\$ -									

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M											
	Test Year Total Budget	Test Year Total Water	Forecast Increase in: 2017	2018	2019	2020	2021	2022	2023	2024	2025
Commodities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office Supplies	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Awards and Indemnities	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Specialty Supplies	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Equip < 5,000	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Postage	\$ -	\$ -	5.25%	6.34%	6.34%	6.34%	6.34%	6.34%	6.35%	6.35%	6.35%
Gasoline	\$ -	\$ -	10.25%	11.34%	11.34%	11.34%	11.34%	11.34%	11.35%	11.35%	11.35%
Diesel	\$ -	\$ -	10.25%	11.34%	11.34%	11.34%	11.34%	11.34%	11.35%	11.35%	11.35%
Car Wash	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
CAP Excess Water Expense	\$ -	\$ -	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Commodities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 232,615	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 232,615	\$ -	\$ -
5150 -- Water Resource											
Personnel	\$ 278,558	\$ -	\$ 278,558	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Regular Full Time	\$ 2,000	\$ -	2,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Part-Time Temporary	\$ 400	\$ -	400	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Longevity Pay	\$ 45,000	\$ -	45,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Health Ins-City	\$ 2,172	\$ -	2,172	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Dental Ins-City	\$ 477	\$ -	477	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Life Insurance-City	\$ 30,843	\$ -	30,843	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
ASRS Retirement-City	\$ 16,599	\$ -	16,599	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Social Security-City	\$ 3,189	\$ -	3,189	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Medicare-City	\$ 4,910	\$ -	4,910	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Workers Comp	\$ -	\$ -	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Medical Examinations	\$ -	\$ -	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Employee Awards	\$ -	\$ -	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	\$ -	\$ -	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Personnel	\$ 384,148	\$ -	\$ -	\$ 384,148	\$ -	\$ -	\$ -	\$ -	\$ 384,148	\$ -	\$ -

	Test Year Total Budget	Adjustments	Test Year Total Water	Forecast Increase in:					2024				
				2017	2018	2019	2020	2021					
CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M													
Contractual Services													
Legal Services	\$ 60,000	\$ -	\$ 60,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Other Professional Services	102,500	-	102,500	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Other Professional Services	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Credit Card Services	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Uniform Maintenance	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Collection/Enforcement	-	-	45,500	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Permitting Fees	45,500	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Permitting Fees	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Custom Printed Forms	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
CAP Water Charges	1,589,000	(1,589,000)	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Water Charges	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Electricity	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Telephone	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Cellphone	2,820	-	2,820	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Imprevements-Repair/Maint	26,000	-	26,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Vehicle Repairs Labor	450	-	450	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Citywide Vehicle Parts	100	-	100	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Dues & Memberships	52,000	-	52,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Employee Training/Develop	5,509	-	5,509	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Mileage Reimbursement	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Contractual Services	\$ 1,883,879	\$ (1,589,000)	\$ 294,879	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Commodities													
Awards & Indemnities	\$ 100	\$ -	\$ 100	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Specialty Supplies	10,000	-	10,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Computer Equip<\$5,000	2,000	-	2,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Gasoline	1,575	-	1,575	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
CAP Excess Water	10,000	-	10,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Commodities	\$ 23,675	\$ -	\$ 23,675	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%				
Total	\$ 2,291,702	\$ (1,589,000)	\$ 702,702										

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE M									
Test Year			Forecast Increase in:						
Total	Budget	Adjustments	2017	2018	2019	2020	2021	2022	2023
Other									
Personnel									
Vehicles	\$ 26,000	\$ -	\$ 26,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Computer Equipment	3,450	-	3,450	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Consulting Services	32,500	-	32,500	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Plant Equipment	157,000	-	157,000	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Personnel	\$ 218,950	\$ -	\$ 218,950						
Contractual Services									
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Expense	-	-	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Contractual Services	\$ -	\$ -	\$ -						
Total	\$ 218,950	\$ -	\$ 218,950						
TOTAL WATER OPERATING I	\$ 8,332,368	\$ (1,683,684)	\$ 6,648,684						

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL										
10 Year Forecast			Test Year			Allocation Percentages				
2016-2025		Total Budget	Adjustments	Total VWW	Total Volume	Treatment BOD	Pretreatment TSS	Collection	Cust Billing	Forecast Increase in:
1	BEGINNING FUND BALANCE									
Wastewater		\$ 14,118,654	\$ (14,118,654)	\$ -						
Beginning of Year Fund Balance		\$ 7,808,605	\$ -	\$ 7,808,605						
2	NON-RATE REVENUES									
Wastewater										
Wastewater Service Sales										
Utility Damage Reimbursement										
Effluent Sales-Construction										
Effluent Sales-Reuse										
Other										
Transfer in Impact fees (for debt svc)										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Revenue										
Total WW NRR		14,835,469		(14,691,089)						
148,380										
3	WASTEWATER OPERATING EXPENSES									
WASTEWATER -Administration and Collection										
5210 – Administration										
Personnel										
Regular Full Time										
Standby Pay										
Health Ins-City										
Dental Ins-City										
Life Insurance-City										
ASRS Retirement-City										
Social Security-City										
Medicare-City										
Workers Comp										
Medical Examinations										
Expense										
Expense										
Expense										
Expense										
Expense										
Expense										
Expense										
Expense										
Personnel										
214,786										
214,786										

10 Year Forecast		Test Year		Total		Allocation Percentages		Pretreatment		Cust Billing		Forecast Increase in:		2017		2018		2019		2020		2021		2022		2023		2024		2025	
2016-2025		Total Budget	Adjustments	VWW	Total	Treatment BOD	Treatment TSS	Collection							2017	2018	2019	2020	2021	2022	2023	2024	2025								
Contractual Services	\$ 200	\$ -	\$ -	\$ 200	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Pre-Employment Changes	\$ -	\$ -	\$ -	\$ 47,757	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Consulting Fees	\$ -	\$ -	\$ -	\$ 7,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Credit Card Services	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Uniform Maintenance	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Uniform Maintenance	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Collection Enforcement	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Permit Fees	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Permit Fees	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Recruitment Advertising	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Custom Printed Forms	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Avondale Sewer Charges	\$ 7,000	\$ -	\$ -	\$ 7,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Telephone	\$ 11,500	\$ -	\$ -	\$ 11,500	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Telephone	\$ 8,000	\$ -	\$ -	\$ 8,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Cellphone	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Building Maintenance	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Vehicle Repairs/Labor	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Citywide Vehicle Parts	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Par Diem Meals	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Lodging	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Transportation	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Dues and Memberships	\$ 650	\$ -	\$ -	\$ 650	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Seminars and Conferences	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Meeting Expense	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Employee Training/Develop	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Commodities	\$ 92,407	\$ -	\$ -	\$ 92,407	-	\$ 500	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%		
Office Supplies	\$ 500	\$ 700	\$ -	\$ 700	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Awards and Indemnities	\$ 9,000	\$ 100	\$ -	\$ 9,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Safety Supplies	\$ 100	\$ -	\$ -	\$ 100	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Postage	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Gasoline	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Purchase of Capacity	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%			
Commodities	\$ 10,300	\$ -	\$ -	\$ 10,300	-	\$ 500	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%		
Capital Outlays	\$ 580,967	\$ 5,119	\$ (5,119)	\$ -	-	\$ 580,967	\$ 5,119	\$ -	\$ -	\$ 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Vehicles	\$ -	\$ -	\$ -	\$ -																											

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL									
10 Year Forecast 2016-2025		Test Year Budget		Total VWW	Adjustments	Total Volume	Treatment BOD	Pretreat- ment	Cust Billing
Personnel	\$	299,301	\$	\$	\$	\$			
Regular Full Time		100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
On Call Pay	5,600	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Standby Pay	12,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Overtime Pay	7,500	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Longevity Pay	800	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Health Ins-City	90,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Dental Ins-City	4,344	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Life Insurance-City	954	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Disability Ins-Short Term	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
ASRS Retirement-City	33,142	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Social Security-City	18,557	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Medicare-City	4,340	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Workers Comp	9,821	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Medical Examinations	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Employee Awards	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Retirement-Health Savings	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Other Employee Benefits	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Personnel	\$ 486,359	\$ -	\$ 486,359	\$ -	\$ 486,359	\$ -	\$ 282,640	\$ -	\$ 282,640
S220 – Collection System									
Contractual Services	\$	\$	\$	\$	\$	\$			
Pre-Employment Charges	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Custom Printed Forms	2,640	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Water Gas	1,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Natural Gas	67,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Electricity	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Telephone	94,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Improvement Repairs – Maint.	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Improvement Repairs – Maint.	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Vehicle Repairs – Labor	17,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Citywide Vehicle Parts	24,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Communication Equip Maint.	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Sewer Main Repairs	75,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Equipment Rentals	2,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Equipment Lease	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Per Diem (Meals)	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Employee Training/Develop	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Expense	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Expense	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Expense	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Contractual Services	\$ 282,640	\$ -	\$ 282,640	\$ -	\$ 282,640	\$ -	\$ 282,640	\$ -	\$ 282,640
Commodities									
Office Supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Computer Equip < \$5,000	5,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Shop Supplies	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Safety Supplies	-	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%
Minor Equipment	85,000	100,000%	0.00%	0.00%	0.00%	100,000%	0.00%	0.00%	0.00%

10 Year Forecast		Test Year Budget		Total VWW	Adjustments	Total VWW	Treatment BOD	Pretreatment TSS	Allocation Percentages Collection	Cust Billing	Forecast Increase in:	2017	2018	2019	2020	2021	2022	2023	2024	2025
CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL																				
Minor Equipment	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Postage	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Gasoline	12,000	-	-	12,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Diesel	-	-	-	12,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Car Wash	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Chemical Products	30,328	-	-	30,328	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Uncollectible Accounts	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Expense	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Commodities	\$ 144,328	\$ -	\$ -	\$ 144,328	-	-	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Capital Outlays	\$ -	\$ -	\$ -	\$ -	-	-	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%								
Expense	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Expense	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Capital Outlays	\$ -	\$ -	\$ -	\$ -	-	-	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total	\$ 913,327	\$ -	\$ -	\$ 913,327	-	-	913,327													
S254 – Environmental Quality																				
Personnel	\$ 147,331	\$ -	\$ -	\$ 147,331	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Regular Full Time	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
On Call Pay	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Standby Pay	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Overtime Pay	4,500	-	-	4,500	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Longevity Pay	2,000	-	-	2,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Health Ins-City	45,000	-	-	45,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Dental Ins-City	2,172	-	-	2,172	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Life Insurance-City	477	-	-	477	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
ASRS Retirement-City	16,313	-	-	16,313	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Social Security-City	9,135	-	-	9,135	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Medicare-City	2,136	-	-	2,136	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Workers' Comp	4,910	-	-	4,910	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Medical Examinations	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Expense	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Expense	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Expense	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Expense	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Personnel	\$ 233,974	\$ -	\$ -	\$ 233,974	-	-	233,974													
Contractual Services	\$ 91,000	\$ 83,895	\$ -	\$ 91,000	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Other Professional Services	\$ 91,000	\$ 83,895	\$ -	\$ 91,000	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Permitting Fees	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
General Equip Maintenance	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Building Maintenance	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Water	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Electricity	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Refuse	-	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Vehicle Repairs Labor	900	-	-	900	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Citywide Vehicle Parts	900	-	-	900	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

10 Year Forecast		Test Year		Total		Allocation Percentages		Forecast Increase in:			
2016-2025		Total Budget	Adjustments	VWV	Total	Treatment BOD	Pretreatment TSS	Collection	Cust Billing	2017	2018
Plant Equipment Maint	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	5.89%	6.34%
Storage Tank Maintenance	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Books and Subscriptions	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Seminars and Conferences	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Employee Training/Develop	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	-	-	-	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Contractual Services	\$ 176,695	\$ -	\$ 176,695	\$ -	\$ 176,695						
Commodities											
Computer Equip <\$5,000	\$ 500	\$ -	\$ 500	\$ -	\$ 500	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Shop Supplies	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Laboratory Supplies	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	100.00%	0.00%	0.00%	0.00%	6.34%	6.34%
Safety Supplies	\$ 1,700	\$ -	\$ 1,700	\$ -	\$ 1,700	100.00%	0.00%	0.00%	0.00%	6.34%	6.34%
Minor Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	6.34%	6.34%
Postage	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	6.34%	6.34%
Gasoline	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	10.89%	11.34%
Diesel	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	11.34%	11.34%
Car Wash	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Chemical Products	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	10.89%	11.34%
Plant Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	5.89%	6.34%
Compute Related	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Compute Related	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Compute of Capacity	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Commodities	\$ 39,700	\$ -	\$ 39,700	\$ -	\$ 39,700						
Capital Outlays											
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Capital Outlays	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	3.00%	3.00%
Total	\$ 450,369	\$ -	\$ 450,369	\$ -	\$ 450,369						
TOTAL ADMINISTRATION	\$ 903,579	\$ 1,965,696	\$ (586,086)	\$ -	\$ 317,493						
TOTAL COLLECTION	\$ 1,965,696	\$ 1,963,696	\$ -	\$ 1,963,696	\$ 1,963,696						

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL										
10 Year Forecast			Test Year			Allocation Percentages				
2016-2025			Total Budget	Adjustments	Total VWW	Total Volume	Treatment BOD	Pretreatment TSS	Collection	Customer Billing
WASTEWATER - Treatment (4200)										
\$551 - Corgett WWTP										
Personnel	\$ 175,317	\$ 1,000	\$ 175,317	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%
Regular Full Time	1,000	-	1,000	1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%
On Call Pay	2,500	-	2,500	100,000%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%
Standby Pay	833	-	833	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Overtime Pay	-	-	333	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Longevity Pay	-	-	27,840	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Health Ins-City	1,448	-	1,448	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Dental Ins-City	-	-	318	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Life Insurance-City	-	-	10,457	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
ASRS Retirement-City	-	-	5,808	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Social Security-City	-	-	1,358	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Medicare-City	-	-	3,001	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Workers' Comp	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Medical Examinations	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Employee Awards	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Expense	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Expense	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Expense	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Expense	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Personnel	\$ 230,214	\$ -	\$ 230,214	\$ -	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%
Consulting Services	\$ 10,000	\$ -	\$ 10,000	\$ -	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%
Consulting Fees	\$ 10,000	\$ -	\$ 10,000	\$ -	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%
Solids Handling	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Solids Handling	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Water	3,500	-	3,500	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Electricity	140,000	-	140,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Electricity	-	-	650	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Refuse	-	-	400	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Building Maintenance	-	-	14,250	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Improvement Repairs/Maint	-	-	4,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
General Equipment Maintenance	-	-	8,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Vehicle Repairs/Labor	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Citywide Vehicle Parts	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Software Maintenance	-	-	80,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Plant Equipment Maint	-	-	10,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Storage Tank Maint	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Equipment Lease	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Expense	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Expense	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Expense	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Expense	-	-	-	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%
Contractual Services	\$ 270,800	\$ -	\$ 270,800	\$ -	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%
Forecast Increase in:										
2017										
2018										
2019										
2020										
2021										
2022										
2023										
2024										
2025										

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL											Forecast Increase in:										
10 Year Forecast		Test Year		Allocation Percentages			Forecast Increase in:						2017	2018	2019	2020	2021	2022	2023	2024	2025
2016-2025		Total Budget	Adjustments	Total VWW	Total Volume	Treatment BOD	Pretreatment TSS	Collection	Cust Billing	Admin	2017	2018	2019	2020	2021	2022	2023	2024	2025		
<u>Commodities</u>	\$ 10,000	\$ 1,000	-	\$ 10,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Computer Equip < \$ 5,000	\$ 10,000	\$ 1,000	-	\$ 10,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Shop Supplies	\$ 10,000	\$ 1,000	-	\$ 10,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Minor Equipment	\$ 50,000	\$ -	\$ 50,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Gasoline	\$ 5,500	\$ -	\$ 5,500	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Diesel	\$ 5,000	\$ -	\$ 5,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Car Wash	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Chemical Products	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Plant Equip	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Expense	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Expense	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Expense	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Expense	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Expense	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Expense	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Expense	\$ -	\$ -	\$ -	\$ 41,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Commodities	\$ 112,500	\$ -	\$ 112,500	\$ 613,514	\$ -	\$ 613,514	\$ 175,317	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
<u>Capital Outlays</u>	\$ -	\$ -	\$ -	\$ -	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Expense	\$ -	\$ -	\$ -	\$ -	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Expense	\$ -	\$ -	\$ -	\$ -	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Capital Outlays	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 613,514	\$ -	\$ 613,514	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Total	\$ 112,500	\$ -	\$ 112,500	\$ 613,514	\$ -	\$ 613,514	\$ 175,317	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%								
5352 – Goodyear WWTP																					
<u>Personnel</u>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 175,317	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Regular Full Time	\$ -	\$ 175,317	\$ 1,000	\$ -	\$ -	\$ -	\$ 175,317	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
On Call Pay	\$ -	\$ -	\$ 2,500	\$ -	\$ -	\$ -	\$ 2,500	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Standby Pay	\$ -	\$ -	\$ 833	\$ -	\$ -	\$ -	\$ 833	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Overtime Pay	\$ -	\$ -	\$ 333	\$ -	\$ -	\$ -	\$ 333	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Premium/Holiday Pay	\$ -	\$ -	\$ 27,840	\$ -	\$ -	\$ -	\$ 27,840	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Longevity Pay	\$ -	\$ -	\$ 1,448	\$ -	\$ -	\$ -	\$ 1,448	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Health Ins-City	\$ -	\$ -	\$ 318	\$ -	\$ -	\$ -	\$ 318	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Dental Ins-City	\$ -	\$ -	\$ 10,457	\$ -	\$ -	\$ -	\$ 10,457	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Life Insurance-City	\$ -	\$ -	\$ 5,808	\$ -	\$ -	\$ -	\$ 5,808	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Disability Ins-Short Term	\$ -	\$ -	\$ 1,358	\$ -	\$ -	\$ -	\$ 1,358	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
ASRS Retirement-City	\$ -	\$ -	\$ 3,001	\$ -	\$ -	\$ -	\$ 3,001	\$ 1,000	100,000%	45.30%	16.60%	38.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Social Security-City	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Medicare-City	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Workers' Comp	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Medical Examinations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Uniform Allowance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Employee Awards	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Retirement Health Savings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Other Employee Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL									
10 Year Forecast 2016-2025	Test Year Total Budget			Total WWV			Allocation Percentages		
	Adjustments	Test Year Budget	Total Volume	Treatment BOD	Pretreat- ment	Cust Billing	Admin	Increase in: 2017 2018 2019 2020 2021 2022 2023 2024 2025	
Contractual Services	\$ -	\$ -	\$ -	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Other Professional Services	\$ 10,000	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Consultant Fees	-	\$ 10,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Uniform Maintenance	\$ 187,556	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Solids Handling	-	\$ 3,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Recruitment Advertising	-	\$ -	\$ 3,000	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Water Service	\$ 3,000	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Avondale Sewer Charges	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Natural Gas	\$ 425,000	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Electricity	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Telephone	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Refuse	\$ 9,000	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Building Maintenance	\$ 6,000	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Improvement Repairs/Maint	\$ 28,000	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
General Equipment Repairs	-	\$ 29,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
General Equipment Maint	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Vehicle Repairs/Labor	\$ 6,000	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Citywide Vehicle Parts	\$ 7,000	\$ -	\$ 12,000	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Compute Software Maint	-	\$ 98,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Plant Equipment Maint	-	\$ -	\$ 10,000	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Plant Equipment Maint	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Storage Tank Maint	\$ 10,000	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Equipment Rentals	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Equipment	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Employee Training/Devel	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Expense	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Expense	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Expense	-	\$ -	\$ 100,00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%
Contractual Services	\$ 802,556	\$ -	\$ 802,556	-	-	-	-	-	-
Commodities	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Office Supplies	\$ 10,000	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Compute Equip < \$ 5,000	-	\$ 10,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Compute Equip < \$ 5,000	\$ 2,500	\$ -	\$ 2,500	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Shop Supplies	-	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Laboratory Supplies	-	\$ -	\$ 97,025	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Minor Equipment	\$ 97,025	\$ -	\$ 9,000	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Gasoline	\$ 9,000	\$ -	\$ 2,400	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Diesel	\$ 2,400	\$ -	\$ 1,000	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Car Wash	\$ 1,000	\$ -	\$ 245,880	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Chemical Products	\$ 245,880	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Machinery Equip	-	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Other Equip	-	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Vehicles	-	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Furniture & fixtures	-	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Expense	-	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Expense	-	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Expense	-	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	3.00%
Commodities	\$ 367,805	\$ -	\$ 367,805	-	-	-	-	-	-

10 Year Forecast 2016-2025		Test Year Budget		Total VWW	Total Adjustments	Allocation Percentages			Pretreat- ment	Cust Billing	Forecast Increase in: 2017 2018 2019 2020 2021 2022 2023 2024 2025				
						Treatment BOD	TSS	Collection							
Capital Outlays		\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%
Communication Equipment		\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%
Expense		\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%
Expense		\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%
Capital Outlays		\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%
Total		\$ 1,400,575	\$ -	\$ -	\$ 1,400,575										
\$451 – Rainbow Valley WWTP															
Personal		\$ 175,317	\$ -	\$ -	\$ 175,317	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	28.00%	3.00%	3.00%
Regular Full Time		\$ 1,000	\$ -	\$ 1,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	23.00%	3.00%	3.00%
On Call Pay		\$ 2,500	\$ -	\$ 2,500	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	28.00%	3.00%	3.00%
Standby Pay		\$ 833	\$ -	\$ 833	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	28.00%	3.00%	3.00%
Overtime Pay		\$ 333	\$ -	\$ 333	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	23.00%	3.00%	3.00%
Longevity Pay		\$ 27,840	\$ -	\$ 27,840	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	28.00%	3.00%	3.00%
Health Ins-City		\$ 1,448	\$ -	\$ 1,448	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	9.00%	34.00%	9.00%	9.00%
Dental Ins-City		\$ 318	\$ -	\$ 318	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	9.00%	29.00%	9.00%	9.00%
Life Insurance-City		\$ 10,457	\$ -	\$ 10,457	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	9.00%	34.00%	9.00%	9.00%
ASRS Retirement-City		\$ 5,808	\$ -	\$ 5,808	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	9.00%	34.00%	9.00%	9.00%
Social Security-City		\$ 1,358	\$ -	\$ 1,358	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	9.00%	29.00%	9.00%	9.00%
Medicare-City		\$ 3,001	\$ -	\$ 3,001	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	9.00%	34.00%	9.00%	9.00%
Workers Comp		\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	9.00%	29.00%	9.00%	9.00%
Unemployment		\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	28.00%	3.00%	3.00%
Other		\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	23.00%	3.00%	3.00%
Other		\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%	0.00%	3.00%	23.00%	3.00%	3.00%
Personnel		\$ 230,214	\$ -	\$ 230,214	\$ -										

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL									
10 Year Forecast		Test Year		Total		Allocation Percentages			
2016-2025		Total Budget	Adjustments	VWW	Total	Treatment BOD	Pretreatment TSS	Collection	Cust Billing
<u>Contractual Services</u>	\$ 10,000	\$ -	\$ -	\$ 10,000	100.00%	45.30%	16.60%	38.10%	0.00%
Consulting fees	\$ 10,000	\$ -	\$ -	\$ 10,000	100.00%	45.30%	16.60%	38.10%	0.00%
Other Professional Services	\$ -	\$ -	\$ -	\$ 10,000	100.00%	45.30%	16.60%	38.10%	0.00%
Laboratory Services	\$ -	\$ -	\$ -	\$ 20,000	100.00%	45.30%	16.60%	38.10%	0.00%
Solids Handling	\$ 20,000	\$ -	\$ -	\$ 20,000	100.00%	45.30%	16.60%	38.10%	0.00%
Water Service	\$ 900	\$ 100,000	\$ 100,000	\$ 100,000	100.00%	45.30%	16.60%	38.10%	0.00%
Electricity	\$ 65,350	\$ 100,000	\$ 100,000	\$ 65,350	100.00%	45.30%	16.60%	38.10%	0.00%
Retuse	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Building Maintenance	\$ 1,000	\$ 100,000	\$ 100,000	\$ 1,000	100.00%	45.30%	16.60%	38.10%	0.00%
Improvement Repairs/Maint	\$ 250	\$ 100,000	\$ 100,000	\$ 250	100.00%	45.30%	16.60%	38.10%	0.00%
General Equipment Maint	\$ -	\$ 100,000	\$ 100,000	\$ 17,500	100.00%	45.30%	16.60%	38.10%	0.00%
Vehicle Repairs/Labor	\$ -	\$ 100,000	\$ 100,000	\$ 1,700	100.00%	45.30%	16.60%	38.10%	0.00%
Citywide Vehicle Parts	\$ 1,500	\$ 100,000	\$ 100,000	\$ 1,500	100.00%	45.30%	16.60%	38.10%	0.00%
Plant Equipment Maint	\$ 68,000	\$ 100,000	\$ 100,000	\$ 68,000	100.00%	45.30%	16.60%	38.10%	0.00%
Storage Tank Maint	\$ 10,000	\$ 100,000	\$ 100,000	\$ 10,000	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ 100,000	\$ 100,000	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Contractual Services	\$ 196,200	\$ -	\$ 196,200	\$ -	\$ 196,200	100.00%	45.30%	16.60%	38.10%
<u>Commodities</u>	\$ 10,000	\$ 500	\$ 10,000	\$ 500	100.00%	45.30%	16.60%	38.10%	0.00%
Computer Equip-&\$5,000	\$ 10,000	\$ 500	\$ 10,000	\$ 500	100.00%	45.30%	16.60%	38.10%	0.00%
Shop Supplies	\$ 42,000	\$ 2,280	\$ 42,000	\$ 2,280	100.00%	45.30%	16.60%	38.10%	0.00%
Minor Equipment	\$ 300	\$ 300	\$ 300	\$ 300	100.00%	45.30%	16.60%	38.10%	0.00%
Gasoline	\$ 43,282	\$ -	\$ 43,282	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Diesel	\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Chemical Products	\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Plant Equip	\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Communication Equip.	\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Expense	\$ -	\$ -	\$ -	\$ -	100.00%	45.30%	16.60%	38.10%	0.00%
Commodities	\$ 98,362	\$ -	\$ 98,362	\$ -	\$ 98,362	100.00%	45.30%	16.60%	38.10%
<u>Capital Outlays</u>	\$ 464,884	\$ (464,884)	\$ 464,884	\$ (464,884)	-	100.00%	45.30%	16.60%	38.10%
F/2015 Carry Overs	\$ -	\$ -	\$ -	\$ -	-	100.00%	45.30%	16.60%	38.10%
Expense	\$ -	\$ -	\$ -	\$ -	-	100.00%	45.30%	16.60%	38.10%
Expense	\$ -	\$ -	\$ -	\$ -	-	100.00%	45.30%	16.60%	38.10%
Capital Outlays	\$ 264,884	\$ (264,884)	\$ 264,884	\$ (264,884)	-	100.00%	45.30%	16.60%	38.10%
Total Rainbow Valley WWTTP	\$ 989,660	\$ -	\$ 989,660	\$ -	\$ 524,776	100.00%	45.30%	16.60%	38.10%
TOTAL TREATMENT	\$ 3,003,748	\$ (464,884)	\$ 2,538,864	\$ (464,884)	\$ 2,538,864	100.00%	45.30%	16.60%	38.10%

Operating Expenses and Capital Outlays – Ten Year Forecast

Table III-4 presents the project team's ten-year forecast of the City's operating costs under the long-term rate plan for the Base Scenario, Alternative 1. FY 2016 budgeted expenditures reflect the proposed water and wastewater budgets adopted in June 2015. All subsequent years in the forecast period were forecast according to the assumptions noted below. Details behind these calculations can be found in the rate model contained in Appendix A. This forecast is based on the following set of assumptions:

- Salaries are forecast to increase at an annual rate of 3.0% in accordance with the City's compensation policy and structure.
- As the City's infrastructure expands, additions to Water personnel are projected over the forecast period. These additions will be primarily in the areas of Water Distribution, Water Production and Water Quality. These increases are projected to increase the current number of Full Time Equivalent ("FTE") Water personnel from 23 in FY 2016 to 50 FTE's by the end of the forecast period.
- Similarly, additions to Wastewater personnel are projected over the forecast period, primarily in the areas of Wastewater Collection and Environmental Quality. These increases are projected to increase the current number of Full Time Equivalent ("FTE") Wastewater personnel from 10 in FY 2016 to 14 FTE's by the end of the forecast period.
- Most operating costs are expected to increase at an annual rate of 3.0%, which is approximately equivalent to the rate of inflation.
- Certain expenses are forecast to increase at above-inflation rates, to reflect the rapid rate of increase of these costs. These expenses include workers compensation, Medicare and insurance.
- Certain expenses will increase at higher rates to reflect the forecast growth in accounts and volumes. These expenses include maintenance and system repairs.
- Non Rate revenues are forecast to increase at 3% annually.

Table III-4 reveals that water-related operating expenses, transfers and capital outlays are forecast to increase from the test year total of \$8,256,037 to **\$18,749,180** by FY 2025. This represents an annual average increase of **9.54%**. Wastewater-related operating costs and capital outlays are expected to increase from the test year total of \$6,628,422 to **\$14,760,044** by FY 2025. This represents an average annual increase of **9.30%**.

TABLE III-4

CITY OF GOODYEAR							
FORECAST OPERATING EXPENSES AND CAPITAL OUTLAYS							
SCENARIO: 2015 05 25 - WPC - Phase In		Personnel Expenditures	Commodities & Contractual Expenditures	Operating Transfers	Capital Outlays including Supplemental Cap Outlays	Total Operating	
WATER Expenses							
2016	\$ 2,584,770	\$ 4,063,914	\$ 700,000	\$ 907,353	\$ 8,256,037		
2017	3,021,103	4,378,326	700,000	1,172,636	9,272,065		
2018	3,492,894	4,691,203	700,000	1,451,795	10,335,893		
2019	4,275,647	5,049,402	700,000	1,732,329	11,757,378		
2020	4,823,121	5,430,357	700,000	2,014,304	12,967,782		
2021	5,177,469	5,920,553	700,000	2,077,789	13,875,811		
2022	5,960,869	6,391,577	700,000	2,143,758	15,196,204		
2023	6,388,676	6,907,158	700,000	2,212,313	16,208,147		
2024	6,953,246	7,471,906	700,000	2,283,564	17,408,716		
2025	7,600,627	8,090,932	700,000	2,357,622	18,749,180		
WASTEWATER Expenses							
2016	\$ 1,625,760	\$ 2,594,293	\$ 1,200,000	\$ 1,208,369	\$ 6,628,422		
2017	1,757,830	2,788,825	1,200,000	2,450,488	8,197,143		
2018	2,001,262	3,011,353	1,200,000	2,441,462	8,654,077		
2019	2,264,706	3,253,843	1,200,000	2,778,225	9,496,774		
2020	2,527,278	3,518,247	1,200,000	3,389,406	10,634,932		
2021	2,834,964	3,806,718	1,200,000	4,552,563	12,394,244		
2022	3,045,544	4,121,631	1,200,000	4,567,757	12,934,932		
2023	3,268,123	4,465,613	1,200,000	4,583,710	13,517,447		
2024	3,509,925	4,841,563	1,200,000	4,600,461	14,151,950		
2025	3,689,308	5,252,685	1,200,000	4,618,050	14,760,044		
TOTAL Operating Expenses							
2016	\$ 4,210,530	\$ 6,658,207	\$ 1,900,000	\$ 2,115,722	\$ 14,884,459		
2017	4,778,933	7,167,151	1,900,000	3,623,124	17,469,208		
2018	5,494,157	7,702,556	1,900,000	3,893,257	18,989,970		
2019	6,540,353	8,303,245	1,900,000	4,510,554	21,254,152		
2020	7,350,400	8,948,604	1,900,000	5,403,710	23,602,714		
2021	8,012,433	9,727,270	1,900,000	6,630,352	26,270,055		
2022	9,006,413	10,513,208	1,900,000	6,711,514	28,131,135		
2023	9,656,799	11,372,771	1,900,000	6,796,023	29,725,594		
2024	10,463,171	12,313,469	1,900,000	6,884,025	31,560,665		
2025	11,289,935	13,343,618	1,900,000	6,975,672	33,509,224		

Water Resources and Recharge

The City's current water supply is sourced from 10 active groundwater wells. However, Arizona groundwater rules require sustainable pumping and /or groundwater replenishment. This may be accomplished in a number of ways including, but not limited to, the purchase of replenishment water through the Central Arizona Groundwater Replenishment District ("CAGRD"), or annual storage and recovery of Central Arizona Project ("CAP"). The less expensive of these alternatives is the purchase of CAP water for groundwater replenishment. However, the City is not currently able to treat and deliver its CAP water directly, so it must be delivered to CAP owned and operated recharge facilities with 20 year permits. Using their allotment for groundwater recharge, the CAP water is utilized in the City's calculation of long term storage credits to offset replenishment obligations.

The City's quantity of CAP water taken in recent years to meet recharge requirements has increased from 1,800 acre feet in FY 2013 to 3,500 acre feet in FY 2014 to 7,229 acre feet in FY 2015 at a current cost of approximately \$1,200,000. This is not projected to be sufficient to replenish the 2015 recharge requirement, and the City will need to draw on long term storage credits previously banked by the City to meet requirements. The demand for

additional CAP water for replenishment is forecast to increase to approximately **10,261** acre feet in FY 2025 at a projected cost of approximately **\$4,000,000**. The City has the opportunity to purchase additional CAP water in excess of their current demand to recharge and bank for long term storage credits for drought protection and emergencies. However, at this time and for purposes of the base scenario, the City has decided to maintain CAP water purchases at the demand level and defer the purchase of "Free Agent" CAP water due to the cost.

The City requested the development of a CAP charge component within the water rate structure developed in the course of this study to recover the cost of replenishment which will be assessed as a separate line item on customer bills.

Existing Debt Service

As shown in Table III-5, the City currently has seven outstanding water and wastewater bonds. The current water and wastewater debt obligations are as follows:

- 1991 Water and Wastewater Revenue Refinancing - issued for water lines and wastewater treatment plant improvements, and to refund all of the Series 1993 and 1994 bonds. This debt will be retired in FY 2018.
- 2002 Water Infrastructure Finance Authority ("WIFA") bond – initially a \$12,399,551 water and wastewater obligation; this will be retired in FY 2021.
- 2009 Water Infrastructure Finance Authority ("WIFA") – initially an \$8,000,000 bond for wastewater treatment plant improvements, issued at 2% interest, on which principal and interest payments are due annually.
- 2009 Water and Sewer Refunding Bonds – refunded with a remaining principal of \$325,000 on which interest only is payable until 2049.
- 2010 Water Revenue Bond – initially issued for \$14,950,000 with a 17 year term at 5.6% interest; currently interest only is payable until 2022.
- 2011 Water and Wastewater Revenue Bond - initially issued for \$15,480,000 with a 20 year term at 5.4%; payments for principal and interest are due annually.
- General Obligation Water and Wastewater Bonds Outstanding – originally issued for \$138,085,000 of which approximately 31% was for water improvements, and 40% for wastewater improvements, and the balance for non-water or wastewater uses. The water and wastewater utility portions of these obligations require principal and interest payments throughout the forecast period as shown in Table III-5.

TABLE III-5

CITY OF GOODYEAR															
CURRENT DEBT SERVICE															
SCENARIO:		Debt Service													
2015 05 25 - WPC - Phase In		1991 WW Revenue Refunding		2002 WIFA		2009 WIFA		2009 Water & Sewer Refunding Bonds		2010 Water Revenue Bond		2011 Water & WW Revenue Bond		General Obligation Bonds	Total Current Debt Service
2016	\$ 237,500	\$ 326,578	\$ -	\$ 3,291	\$ 827,044	\$ 941,636	\$ 3,186,544	\$ 5,522,593							
2017	200,000	326,578	-	3,291	827,044	942,008	3,218,800	5,517,720							
2018	200,000	326,578	-	3,291	827,044	945,900	3,221,103	5,523,916							
2019	-	326,578	-	3,291	827,044	943,380	3,331,746	5,432,039							
2020	-	326,578	-	3,291	827,044	945,000	3,339,705	5,441,618							
2021	-	340,295	-	3,291	827,044	941,580	2,471,589	4,583,798							
2022	-	-	-	3,291	1,127,044	943,605	2,462,720	4,536,660							
2023	-	-	-	3,291	1,127,044	943,886	2,455,081	4,529,301							
2024	-	-	-	3,291	1,127,044	945,889	2,472,024	4,548,247							
2025	-	-	-	3,291	1,126,294	945,889	2,472,024	2,075,473							
2016	\$ 237,500	\$ 620,025	\$ 346,141	\$ 7,678	\$ -	\$ 104,626	\$ 4,084,179	\$ 5,400,149							
2017	200,000	620,025	346,141	7,678	-	104,668	4,146,718	5,425,230							
2018	-	620,025	346,141	7,678	-	105,100	4,078,443	5,157,387							
2019	-	620,025	346,141	7,678	-	104,820	4,252,620	5,331,284							
2020	-	620,025	346,141	7,678	-	105,000	4,378,503	5,457,347							
2021	-	646,067	346,141	7,678	-	104,620	2,718,927	3,823,433							
2022	-	-	346,141	7,678	-	104,845	2,728,826	3,187,490							
2023	-	-	346,141	7,678	-	104,876	2,725,526	3,184,221							
2024	-	-	346,141	7,678	-	105,099	2,740,483	3,199,401							
2025	-	-	346,141	7,678	-	105,099	2,740,483	458,918							
2016	\$ 475,000	\$ 946,604	\$ 346,141	\$ 10,969	\$ 827,044	\$ 1,046,263	\$ 7,270,723	\$ 10,922,743							
2017	400,000	946,604	346,141	10,969	827,044	1,046,675	7,365,518	10,942,950							
2018	200,000	946,604	346,141	10,969	827,044	1,051,000	7,299,546	10,681,303							
2019	-	946,604	346,141	10,969	827,044	1,048,200	7,584,366	10,763,323							
2020	-	946,604	346,141	10,969	827,044	1,050,000	7,718,208	10,898,965							
2021	-	986,362	346,141	10,969	827,044	1,046,200	5,190,516	8,407,231							
2022	-	-	346,141	10,969	1,127,044	1,048,450	5,191,546	7,724,150							
2023	-	-	346,141	10,969	1,127,044	1,048,763	5,180,607	7,713,522							
2024	-	-	346,141	10,969	1,127,044	1,050,988	5,212,508	7,747,648							
2025	-	-	346,141	10,969	1,126,294	1,050,988	5,212,508	2,534,391							

Capital Improvement Plan

Capital improvements are commonly defined as "expenditures to acquire or improve long term assets such as land, facilities, equipment or infrastructure." These expenditures typically are for improvements exceeding \$50,000 and for assets having an anticipated life of five years or more. In 2015 Carollo Engineering completed a 5 year Capital Improvement Plan ("CIP") that provided an assessment of the City's immediate needs for its water, wastewater and reclaimed water systems. Recommendations for the water system included approximately \$39.0 million of water system improvements over the next five years, and recommendations for the wastewater system included approximately \$18.5 million of wastewater system improvements over the next five years. (These totals did not include expenditures for items such as line oversizing for new development, or one time and ongoing budget Supplements which are already included in the Capital Outlay portion of the rate model and forecast.) The City has multiple funding sources for improvements depending upon the nature of the improvements. Following the principle that "growth pays for growth," developer contributions and impact fees have historically been used when available to fund infrastructure for new development, and the City expects to continue this practice whenever possible.

A functional breakdown of the five year CIP is presented in **Table III-6**. The forecast capital improvement plan is assumed to be the same for each of the rate design scenarios examined in this study.

TABLE III-6

CITY OF GOODYEAR		CAPITAL IMPROVEMENT PLAN	
SCENARIO:	2015 05 25 - WPC - Phase In		
		Total	
WATER Capital Improvement Plan		(Millions \$)	
Water Supply		\$27.90	
Pumping		1.70	
Water Storage		4.80	
CAP Capital (Already in CIP)		1.40	
Bullard Campus Treatment Rehabilitation		0.14	
Water Main Replacements		2.90	
DMOM		<u>0.10</u>	
Total		\$38.94	
WASTEWATER Capital Improvement Plan			
Rainbow Valley WRF Improvements		\$1.30	
Corgett WRF Improvements		1.00	
Goodyear WRF Improvements		2.90	
Lift Station and Force Main Improvements		2.50	
Collection System Improvements		4.80	
City Identified Wastewater Projects		<u>5.90</u>	
Total		\$18.40	
TOTAL Capital Improvement Plan			
Total		\$57.34	

Significant water system capital projects included in the FY 2016 through FY 2020 CIP include:

- Construction of 3 new wells
- Replacement of 3 wells, each of which currently exceeds its useful life of 50 years and is producing water at marginal flow rates
- Rehabilitation of 3 wells that are currently 17 to 27 years old and producing water at reduced flow rates
- Additional Booster pump stations
- Construction of a 1.5 million gallon storage reservoir
- Replacement of inferior quality pipe experiencing multiple main breaks annually

- Implementation of a Distribution Management, Operations and Maintenance (DMOM) program to maintain and manage the water distribution system more efficiently and effectively

Significant wastewater system capital projects included in the FY 2016 through FY 2020 CIP include:

- Improvements to lift stations and manhole rehabilitation
- Addition of improved screening within the Perryville Prison Pump Station
- Additional capacity for the Goodyear WRF Interceptor
- Implementation of a Capacity, Management, Operations and Maintenance (CMOM) program to maintain and manage the wastewater collection system more efficiently and effectively

Forecast Debt Service

A key factor in the development of the City's long term water and wastewater rate plan is the amount of additional debt forecast to be issued by the City to fund capital projects not funded through development fees or other sources such as private sector development agreement financing or grants.

The debt forecast to be issued by the City is assumed to be the same for each of the rate design scenarios examined in this study, and is assumed to be for a 30 year term at an interest rate of 4.0%. Forecast debt to be issued is presented in **Table III-7**. **Table III-8** presents the City's total debt service payments over the next decade.

Changes in any of these assumptions may require significant changes to the funding assumptions for the CIP and to the rate plan.

TABLE III-7

CITY OF GOODYEAR						
FORECAST BOND ISSUES						
SCENARIO:		2015 05 25 - WPC - Phase In		Years	Years	
		Total		Water		Wastewater
2016	\$	14,500,000	\$	7,000,000	\$	7,500,000
2017		9,000,000		9,000,000		-
2018		17,000,000		17,000,000		-
2019		2,000,000		2,000,000		-
2020		5,984,364		5,984,364		-
2021		4,500,000		-		4,500,000
2022		5,700,000		5,700,000		-
2023		15,000,000		-		15,000,000
2024		41,500,000		41,500,000		-
2025		-		-		-
Total Bonds		115,184,364		88,184,364		27,000,000

TABLE III-8

CITY OF GOODYEAR										
CURRENT AND FORECAST DEBT SERVICE										
SCENARIO: 2015 05 25 - WPC - Phase In										
		Water Utility			Wastewater Utility			Total Current & Future Debt Service		
		Current Debt	Projected Debt	Water Total	Current Debt	Projected Debt	WW Total			
2016	\$	5,522,593	\$ -	\$ 5,522,593	\$ 5,400,149	\$ -	\$ 5,400,149	\$ 10,922,743		
2017		5,517,720		404,811	5,922,531	5,425,230	433,726	5,858,956	11,781,486	
2018		5,523,916		925,282	6,449,198	5,157,387	433,726	5,591,113	12,040,311	
2019		5,432,039		1,908,393	7,340,432	5,331,284	433,726	5,765,010	13,105,442	
2020		5,441,618		2,024,053	7,465,671	5,457,347	433,726	5,891,073	13,356,744	
2021		4,583,798		2,370,130	6,953,928	3,823,433	433,726	4,257,159	11,211,087	
2022		4,536,660		2,370,130	6,906,790	3,187,490	693,961	3,881,451	10,788,241	
2023		4,529,301		2,699,761	7,229,063	3,184,221	693,961	3,878,182	11,107,245	
2024		4,548,247		2,699,761	7,248,009	3,199,401	1,561,413	4,760,814	12,008,822	
2025		4,547,497		5,099,711	9,647,208	3,199,401	1,561,413	4,760,814	14,408,021	

Non-Rate Revenues

Although rate revenues constitute the majority of the revenue received by the City for water and wastewater service, a certain amount of revenue is accrued from non-rate sources. These revenues include other general fees, surcharges, development charges, and service revenues. These non-rate revenues are subtracted from the overall budget to determine the revenue requirement to be raised from rates.

Most non-rate revenues are conservatively forecast to remain stable during the next ten years. The most significant exception is connection fee revenues, which are forecast to increase as the number of new connections increases over the forecast period due to an improving economy and additional residential development. Revenues from Valencia wastewater accounts are included in Non-Rate Revenues as they are outside the City's service area. Table III-9 presents forecast non-rate revenues by year over the next decade under Alternative 1. Further detail on current and forecast non-rate revenues is presented in Section V of this report.

TABLE III-9

CITY OF GOODYEAR				
FORECAST NON-RATE REVENUES				
SCENARIO: 2015 05 25 - WPC - Phase In				
		Total	Water	Wastewater
2016	\$	2,357,343	\$ 2,208,963	\$ 148,380
2017		1,568,746	1,415,914	152,831
2018		1,615,808	1,458,392	157,416
2019		1,664,282	1,502,143	162,139
2020		1,714,211	1,547,208	167,003
2021		1,765,637	1,593,624	172,013
2022		1,818,606	1,641,433	177,173
2023		1,873,164	1,690,676	182,489
2024		1,929,359	1,741,396	187,963
2025		1,987,240	1,793,638	193,602

Net Revenue Requirement

Table III-10 presents the City's net revenue requirement to be raised from rates in the test year FY 2016. As the table reveals, the net revenue requirement to be raised from rates for water service is \$12,581,667, and for wastewater service is \$11,880,192. The total revenue requirement is **\$24,461,859**.

TABLE III-10

CITY OF GOODYEAR				
TEST YEAR REVENUE REQUIREMENT				
SCENARIO:	2015 05 25 - WPC - Phase In	Water	Wastewater	Total
Budget Operating Expenses:				
Personnel	\$ 2,584,770	\$ 1,625,760	\$ 4,210,530	
Operating Expenses - Commodities/Contractual	4,063,914	2,594,293	6,658,207	
CAP Water Costs	1,012,000	-	1,012,000	
Operating Transfers	700,000	1,200,000	1,900,000	
Total Operating Expenses	\$ 8,360,684	\$ 5,420,053	\$ 13,780,737	
Capital Outlays	907,353	1,208,369	2,115,722	
Capital Outlays - Supplements	-	-	-	
Debt Service -- Current	5,522,593	5,400,149	10,922,743	
Debt Service -- Forecast	-	-	-	
Total Budget Expenditures	\$ 14,790,630	\$ 12,028,572	\$ 26,819,202	
Less: Non-Rate Revenues	2,208,963	148,380	2,357,343	
Net Revenue Requirement to be Raised from Rates	\$ 12,581,667	\$ 11,880,192	\$ 24,461,859	



Table III-11 presents the ten year forecast for the City's net revenue requirement to be raised from rates under Alternative 1. As the table reveals, the City's net revenue requirement is forecast to increase from \$24,461,859 in FY 2016 to \$49,879,167 in FY 2025. This represents an annual rate of growth of 8.24%.

TABLE III-11

CITY OF GOODYEAR										
CURRENT AND FORECAST REVENUE REQUIREMENT										
SCENARIO:	2015 05 25 - WPC - Phase In									
	Operating Expenses	Capital Outlays	Capital Outlays - Supplements	Current Debt Service	Future Debt Service	Transfers Out	Total Cost of Service	Less Non-Rate Revenues	Net Revenue Requirement	
WATER Revenue Requirement										
2016	\$ 7,660,684	\$ 907,353	\$ -	\$ 5,522,593	\$ -	\$ 700,000	\$ 14,790,630	\$ 2,208,963	\$ 12,581,667	
2017	8,919,430	672,636	500,000	5,517,720	404,811	700,000	16,714,596	1,415,914	15,298,682	
2018	10,193,098	926,795	525,000	5,523,916	925,282	700,000	18,794,090	1,458,392	17,335,699	
2019	11,677,826	1,181,079	551,250	5,432,039	1,908,393	700,000	21,450,587	1,502,143	19,948,444	
2020	12,993,181	1,435,491	578,813	5,441,618	2,024,053	700,000	23,173,155	1,547,208	21,625,948	
2021	14,081,310	1,470,036	607,753	4,583,798	2,370,130	700,000	23,813,027	1,593,624	22,219,403	
2022	15,629,811	1,505,617	638,141	4,536,660	2,370,130	700,000	25,380,358	1,641,433	23,738,926	
2023	16,894,639	1,542,265	670,048	4,529,301	2,699,761	700,000	27,036,015	1,690,676	25,345,339	
2024	18,374,314	1,580,013	703,550	4,548,247	2,699,761	700,000	28,605,886	1,741,396	26,864,491	
2025	19,640,721	1,618,894	738,728	4,547,497	5,099,711	700,000	32,345,550	1,793,638	30,551,912	
WASTEWATER Revenue Requirement										
2016	\$ 4,220,053	\$ 1,208,369	\$ -	\$ 5,400,149	\$ -	\$ 1,200,000	\$ 12,028,572	\$ 148,380	\$ 11,880,192	
2017	4,546,655	2,050,488	400,000	5,425,230	433,726	1,200,000	14,056,099	152,831	13,903,267	
2018	5,012,615	1,928,962	512,500	5,157,387	433,726	1,200,000	14,245,190	157,416	14,087,774	
2019	5,518,549	2,152,600	625,625	5,331,284	433,726	1,200,000	15,261,784	162,139	15,099,645	
2020	6,045,526	2,600,000	789,406	5,457,347	433,726	1,200,000	16,526,004	167,003	16,359,001	
2021	6,641,681	3,748,686	803,877	3,823,433	433,726	1,200,000	16,651,403	172,013	16,479,390	
2022	7,167,175	3,748,686	819,070	3,187,490	693,961	1,200,000	16,816,383	177,173	16,639,209	
2023	7,733,736	3,748,686	835,024	3,184,221	693,961	1,200,000	17,395,629	182,489	17,213,140	
2024	8,351,488	3,748,686	851,775	3,199,401	1,561,413	1,200,000	18,912,763	187,963	18,724,800	
2025	8,941,994	3,748,686	869,364	3,199,401	1,561,413	1,200,000	19,520,857	193,602	19,327,255	
TOTAL Revenue Requirement										
2016	\$ 11,880,737	\$ 2,115,722	\$ -	\$ 10,922,743	\$ -	\$ 1,900,000	\$ 26,819,202	\$ 2,357,343	\$ 24,461,859	
2017	13,466,084	2,723,124	900,000	10,942,950	838,536	1,900,000	30,770,695	1,568,746	29,201,949	
2018	15,205,713	2,855,757	1,037,500	10,681,303	1,359,007	1,900,000	33,039,280	1,615,808	31,423,472	
2019	17,196,375	3,333,679	1,176,875	10,763,323	2,342,119	1,900,000	36,712,371	1,664,282	35,048,089	
2020	19,038,706	4,035,491	1,368,219	10,898,965	2,457,779	1,900,000	39,699,160	1,714,211	37,984,949	
2021	20,722,992	5,218,722	1,411,630	8,407,231	2,803,856	1,900,000	40,464,430	1,765,637	38,698,793	
2022	22,796,986	5,254,303	1,457,211	7,724,150	3,064,091	1,900,000	42,196,741	1,818,606	40,378,135	
2023	24,628,375	5,290,952	1,505,072	7,713,522	3,393,723	1,900,000	44,431,643	1,873,164	42,558,479	
2024	26,725,802	5,328,700	1,555,325	7,747,648	4,261,174	1,900,000	47,518,650	1,929,359	45,589,290	
2025	28,582,715	5,367,580	1,608,092	7,746,898	6,661,123	1,900,000	51,866,407	1,987,240	49,879,167	

Detailed calculations are presented in the rate model contained in Appendix A of this report.

Water Utility Cost Functionalization, Classification and Allocation

Once the total water and wastewater system costs have been identified, the next step in the rate development process is to isolate the costs associated with each system function. Some of these expenditures are a function of base water demand; others are based on the peak demands placed on the system. Certain costs are associated with serving customers regardless of the volume of water use or wastewater discharge. The basic steps used to allocate the City's water revenue requirements include the following:

1. Each system's costs (revenue requirements) are categorized by utility function (i.e. treatment, distribution, administrative, customer). This process is known as *functionalization*.
2. Functionalized costs are classified based on the service characteristics or the types of demand served by the utility (base and maximum day). This process is known as *classification*.
3. Costs by service characteristic are allocated to customer classes in proportion to the service demands demonstrated by each class.

This three-step process allows for the allocation of system costs in the same terms as customer classes. The approaches described in this section follow standard industry practices. Water system costs are allocated to the following functions:

Supply/Treatment – the process by which raw water is obtained and converted to potable water

Distribution – the lines that carry water to individual customers' properties

Administration – miscellaneous overhead and other non-operating costs

Customer Billing – the processes involved in billing and providing other services to customers

The project team allocated operating budget line item expenses individually to system functions based on general guidelines, specific research and input from City staff. The results of the allocation process for the test year are presented in **Table III-12**. The rate model presented in Appendix A includes a detailed listing of the allocations by line item.

TABLE III-12

CITY OF GOODYEAR TEST YEAR WATER COST FUNCTIONALIZATION		
SCENARIO: 2015 05 25 - WPC - Phase In		
Function	Revenue Requirement	Percent
CAP Water	\$ 860,859	6.8%
Treatment	7,761,343	61.7%
Distribution	1,666,885	13.2%
Administration	1,845,988	14.7%
Customer	<u>446,592</u>	<u>3.5%</u>
Total	12,581,667	100.0%

Water Utility Cost Classification

The allocation of functionalized water system costs to service characteristics follows the base-extra capacity cost allocation method recommended by AWWA. Using this method, costs are segregated into the following categories:

Base costs – capital costs and O&M expenses associated with service to customers under average demand conditions. This category does not include any costs attributable to variations in water use resulting from peaks in demand. Base costs tend to vary directly with the total quantity of water used.

Maximum Day/Extra Capacity costs – costs attributable to facilities that are designed to meet peaking requirements. These costs include capital and operating charges for additional plant and system capacity beyond that required for average usage.

Customer Billing costs – costs associated with any aspect of customer service, including billing, accounting, and meter services. These costs are independent of the amount of water used and the size of the customer's meter, and are not subject to peaking factors.

According to AWWA Manual M-1 (p.12), in the base-extra capacity method, care must be taken in separating costs between those devoted to base capacity and those devoted to extra capacity. Previous engineering studies have calculated the City's peak to average capacity factor at 1.7.

The peak to average factor is calculated by dividing the volume on the peak day of the year by the average daily volume. This means that facilities designed to meet maximum-day requirements, such as the treatment and distribution functions, are allocated 58.82% (1/1.70) to base, and 41.18% to extra capacity.

All customer service-related costs are allocated 100% to customer billing. Administration costs are generally not directly assignable to individual classifications. Therefore, it is standard ratemaking practice to allocate these costs on an indirect basis to service characteristics. The rate model in Appendix A provides the detailed allocations of costs to service characteristics. The system-wide costs by service characteristic are shown in Table III-13. As with cost functionalization, these percentages are not expected to change significantly in the forecast period.

TABLE III-13

CITY OF GOODYEAR			
TEST YEAR WATER COST CLASSIFICATION			
SCENARIO: 2015 05 25 - WPC - Phase In		FY 2016	
Function		Revenue Requirement	Percent
Base	\$	6,114,219	48.60%
Maximum Day		3,540,605	28.14%
Maximum Hour		1,996,239	15.87%
Customer		<u>930,603</u>	<u>7.40%</u>
Total		12,581,667	100.0%

Water Utility Cost Allocation

Allocation of costs by service characteristic to customer classes is based on the proportionate use levels of each characteristic by each class. The water utility costs for test year 2016 by customer classes are presented in **Table III-14**. The water utility costs by customer class for the entire forecast period under the Base Scenario - Alt 1 are summarized in **Table III-15**. Overall cost calculations are presented in detail in the rate model contained in Appendix A.

TABLE III-14

CITY OF GOODYEAR			
TEST YEAR WATER COST ALLOCATION			
SCENARIO:		FY 2016	
2015 05 25 - WPC - Phase In		Revenue	
Function	Requirement	Percent	
Residential-City	\$ 5,812,277	46.2%	
Residential-County	51,437	0.4%	
Multi-Family	129,301	1.0%	
Commercial	789,526	6.3%	
Church	29,073	0.2%	
Industrial	337,971	2.7%	
Hydrant	191,325	1.5%	
Institutional	72,947	0.6%	
Schools	94,111	0.7%	
Irrigation	4,061,699	32.3%	
Reclaimed	-	0.0%	
Total	12,581,667	92.0%	

TABLE III-15

CITY OF GOODYEAR																								
FORECAST WATER COST ALLOCATION																								
Year	Residential-City		Residential-County		Multi-Family		Commercial		Church		Industrial		Hydrant		Institutional		Schools		Irrigation		CAP Water Costs		Total	
	\$ 5,812,277	\$ 51,437	\$ 129,301	\$ 789,526	\$ 29,073	\$ 337,971	\$ 191,325	\$ 72,947	\$ 94,111	\$ 4,061,699	\$ 1,012,000	\$ 12,581,667												
2016	\$ 5,812,277	\$ 51,437	\$ 129,301	\$ 789,526	\$ 29,073	\$ 337,971	\$ 191,325	\$ 72,947	\$ 94,111	\$ 4,061,699	\$ 1,012,000	\$ 12,581,667												
2017	6,951,685	60,202	151,316	969,632	35,822	405,309	241,589	89,379	114,310	4,759,439	1,520,000	15,298,682												
2018	7,722,491	66,876	168,069	1,097,351	39,790	450,232	268,401	99,294	126,980	5,287,215	2,009,000	17,335,699												
2019	8,853,827	76,673	192,661	1,281,708	45,615	516,170	307,750	113,846	145,577	6,061,839	2,352,777	19,948,444												
2020	9,490,245	82,184	206,477	1,399,603	48,889	553,250	329,903	122,036	156,035	6,497,624	2,739,702	21,625,948												
2021	9,652,625	83,589	209,976	1,450,245	49,721	562,692	335,579	124,130	158,699	6,608,857	2,983,288	22,219,403												
2022	10,253,044	88,788	223,001	1,569,337	52,809	597,668	356,488	131,858	168,563	7,020,005	3,277,365	23,738,926												
2023	10,881,270	94,227	236,626	1,696,717	56,039	634,261	378,368	139,945	178,884	7,450,198	3,598,805	25,345,339												
2024	11,449,340	99,146	248,937	1,818,762	58,959	667,343	398,160	147,259	188,215	7,839,208	3,949,162	26,864,491												
2025	13,271,955	114,927	288,516	2,147,805	68,337	773,542	461,589	170,710	218,168	9,087,201	3,949,162	30,551,912												

Wastewater Utility Cost Functionalization and Allocation

Wastewater system costs are allocated to the following functions:

Treatment -- Volume – the costs associated with treating wastewater volume discharges

Collection – the lines that transport wastewater from customers' properties to the wastewater treatment plant

Administration – miscellaneous overhead and other non-operating costs

Customer Billing – the processes involved in billing and other services to customers

As was the case for the water system, wastewater utility operating budget line item expenses are allocated individually to functions. The results of the allocation process are presented in **Table III-16**. The rate model in Appendix A presents a detailed listing of the cost allocations by line item. As with the water utility, these percentages are not forecast to change significantly during the next ten years.

High strength commercial and industrial customers pay separate pretreatment and strength-related wastewater charges. For purposes of this study, these costs are incorporated into the rate model in addition to the flow related costs of treatment and collection.

TABLE III-16

CITY OF GOODYEAR			
TEST YEAR WASTEWATER COST FUNCTIONALIZATION			
SCENARIO:			
2015 05 25 - WPC - Phase In			
Function	FY 2016 Revenue Requirement		Percent
Treatment			
Volume	\$	4,580,688	38.6%
BOD		1,313,183	11.1%
TSS		2,903,296	24.4%
Collection			
Collection Overall		1,584,251	13.3%
Pre-Treatment			
	-		0.0%
Adm/Non-Departmental		609,876	5.1%
Customer Billing		888,898	7.5%
Total		11,880,192	100.0%

Wastewater Utility Cost Allocation

Allocation of wastewater utility costs by service characteristic to customer classes is performed in the same manner as described for the water utility. The total wastewater utility costs by customer class are summarized in Table III-17. The rate model in Appendix A presents a detailed listing of the cost calculations by line item.

TABLE III-17

CITY OF GOODYEAR TEST YEAR WASTEWATER COST ALLOCATION			
SCENARIO: 2015 05 25 - WPC - Phase In		FY 2016 Revenue Requirement	
Function		Requirement	Percent
Residential-City	\$ 8,361,969		70.4%
Residential-County	1,975		0.0%
Multi-Family	209,773		1.8%
Commercial	1,159,406		9.8%
Church	42,200		0.4%
Industrial	327,998		2.8%
Effluent	201,480		1.7%
Institutional	57,305		0.5%
School	108,065		0.9%
Perryville Prison	1,410,020		11.9%
Total	11,880,192		100.0%

The wastewater utility costs by customer class for the entire forecast period under the Base Scenario - Alt 1 are summarized in Table III-18. Overall cost calculations are presented in detail in the rate model contained in Appendix A.

TABLE III-18

CITY OF GOODYEAR FORECAST WASTEWATER COST ALLOCATION													
SCENARIO: 2015 05 25 - WPC - Phase In		Year	Residential-City	Residential-County	Multi-Family	Commercial	Church	Industrial	Effluent	Institutional	School	Perryville Prison	Total
2016	\$ 8,361,969	\$ 1,975	\$ 209,773	\$ 1,159,406	\$ 42,200	\$ 327,998	\$ 201,480	\$ 57,305	\$ 108,065	\$ 1,410,020	\$ 11,880,192		
2017	9,734,700	2,229	243,422	1,396,791	51,495	395,228	234,391	70,279	134,532	1,640,202	13,903,267		
2018	9,849,394	2,255	246,380	1,440,431	52,118	400,038	229,669	71,131	136,165	1,660,194	14,087,774		
2019	10,513,827	2,404	265,269	1,579,587	56,042	430,899	239,582	76,537	146,547	1,788,952	15,099,645		
2020	11,340,277	2,591	288,838	1,751,736	60,936	469,414	252,771	83,280	159,499	1,949,659	16,359,001		
2021	11,408,786	2,606	290,384	1,794,401	61,268	471,908	245,988	83,730	160,358	1,959,961	16,479,390		
2022	11,502,945	2,628	292,646	1,842,552	61,750	475,574	239,974	84,385	161,610	1,975,145	16,639,209		
2023	11,870,156	2,711	302,804	1,942,289	63,868	492,150	240,435	87,297	167,200	2,044,229	17,213,140		
2024	12,854,202	2,933	330,837	2,161,391	69,690	537,954	254,522	95,318	182,606	2,235,347	18,724,800		
2025	13,236,017	3,019	341,354	2,272,018	71,884	555,113	254,274	98,334	188,394	2,306,847	19,327,255		

Reclaimed Water Rate

Reclaimed water refers to the use of treated effluent, and recharge refers to the practice of storing renewable surface water (underground) for recovery later during periods of reduced water supply. As a member of the Central Arizona Groundwater Replenishment District ("CAGRD"), the City's Water Resource Plan includes the development and operation of multiple Water Reclamation Facilities ("WRF") for effluent reuse and recharge. City's recharge program is subject to numerous requirements and guidelines put forth in Arizona's Assured Water ("AWS") Rules and the Groundwater Replenishment District Act, including the ongoing process of obtaining and maintaining many permits. The direct cost of these permits as well as the indirect costs of the man-hours required to complete the applications and related documentation are significant factors in calculating the annual cost of these programs.

The City is required to replenish the aquifer for excess groundwater used through the utilization of reusable water supplies. Through these actions, the City acquires recharge credits. While the City reduces its reliance on groundwater through the use of treated effluent, it must still meet the remainder of its replenishment obligation through other means or pay CAGRD per acre-foot for the unmet portion of its replenishment obligation. Among the options available to the City are the following:

- Use of reclaimed water for recharge in areas of groundwater pumping
- Use of reclaimed water to reduce groundwater pumping through the use of treated effluent for construction water, turf and landscape irrigation and industrial purposes
- Use of the City's allocation of CAP water for long term storage credits

While the golf courses, parks and other areas irrigated with reclaimed water are directly served by the utility, in practice, the full cost of these functions are not typically passed through to the users. As noted in the AWWA Water Reuse Rates and Charges 2000 and 2007 Survey Results, published by the AWWA Water Reuse Committee:

"Reclaimed water has become a key resource to provide sustainable water supplies to meet...future planning requirements. However, the pricing and recovery of costs associated with reclaimed water has been an obstacle for many utilities. Generally speaking, if reclaimed water rates were set at the cost of service, they would be higher than potable water rates due to the increased treatment required as well as the cost of a secondary distribution system. Obviously, this would not encourage the use of reclaimed water by a utility's customers. Rates are generally set at a much lower rate than the full cost of service; therefore costs will usually not be recovered through reclaimed water rates."

Customers receiving reclaimed water do not receive a greater benefit from reclaimed water than they would by receiving potable water unless the non-implementation of reclaimed water use will result in potable water restrictions through regulation, conservation, drought, etc. However, reclaimed water benefits a utility's existing water customers by deferring, reducing or eliminating the need to develop new sources of supply in the future. Additionally, a utility's existing wastewater customers benefit if no or fewer upgrades are needed for the system to meet regulatory requirements because of reuse standards. This can defer, reduce or eliminate the need to develop additional treatment capacity."

The study found that 42% of surveyed utilities set their reclaimed water rates below the cost of service in order to promote the use of reclaimed water, and market research indicates the maximum rate at which to set reclaimed water is the utility's current potable water rate.

Section IV

SECTION IV

Water and Wastewater Rate Design



Rate design involves determining charges for each class of customers that will generate a desired level of revenue in accordance with AWWA and other industry cost of service rate-making principles. The water and wastewater rates developed in this section are designed to recover the test year and forecast revenue requirements while providing funding for the identified capital improvements. The most significant impact on rates will be the amount of debt that will be required to fund the capital improvement plan.

The water and wastewater rate plans recommended to the City were also developed in accordance with the City's

input, financial policies and goals. Among these financial policies and goals was the following:

"Enterprise Funds should be self-sufficient. They should include a sufficient un-appropriated fund balance to absorb fluctuations in annual revenue. Wherever possible, enterprise funds should be charged directly for "overhead" services, rather than using an indirect service transfer. These services include such things as employee fringe benefits, insurance costs, and telephone charges. Provision should also be made for interdepartmental charges for services such as solid waste disposal (landfill) and vehicle repair, when this is practical. Operational revenue should be great enough to cover capital costs and replacement."

During the course of this engagement the project team met with City staff, the Water Planning committee and the City Council to discuss numerous alternative rate scenarios and rate plans. As a result of these discussions, staff, the Water Planning Committee and the project team settled on the rate design scenario contained in this section. As noted in the previous section, these revenue requirements include all direct and indirect expenditures for operations and maintenance, capital requirements for expansion, repair and replacement, debt service and required reserves. The proposed rate plan is designed to capture sufficient revenues for these purposes as well as coverage of the basic cost of service.

In accordance with City policies, it is recommended that rate changes continue to be implemented in January of each year. The FY 2016 rate adjustment is forecast for implementation in January 2016.

Alternative 1 – “Water Planning Committee Phase In”

Under Alternative 1, the City implements a series of annual water and wastewater rate adjustments over the period FY 2016 - FY 2025 to achieve cost of service rates for water and wastewater operations. The projected rate revenues collected are forecast to be sufficient to fund all operating expenses and capital obligations in each of the forecast years. This alternative assumes the following:

- Maintains the current rate design structure for both water and wastewater customer classes
- Rate adjustments are uniformly applied to both base and volume charges
- Water rate adjustments are uniformly applied to all water rate classifications
- Wastewater rate adjustments are uniformly applied to all wastewater rate classifications

Table IV-1 presents a summary of the water rate plan proposed for the City under this alternative for the next five years and **Table IV-2** presents a summary of the wastewater rate plan. **Table IV-3** presents examples of the impact on monthly bills. The recommended rate plan continues the City's policy of implementing water and wastewater rate changes in January of each year.

TABLE IV-1

CITY OF GOODYEAR		WATER RATES: ALTERNATIVE 1						
SCENARIO:								
2015 05 25 - WPC - Phase In		Current	Effective Jan-16	Effective Jan-17	Effective Jan-18	Effective Jan-19	Effective Jan-20	
Base Charge – Per Month								
3/4"	\$ 11.24	\$ 12.70	\$ 14.73	\$ 16.35	\$ 17.49	\$ 18.54		
1 "	15.54	17.56	20.37	22.61	24.19	25.64		
1 1/2"	25.12	28.39	32.93	36.55	39.11	41.46		
2"	40.67	45.96	53.31	59.17	63.31	67.11		
CAP Water Charge/1,000 Gallons								
All Usage	-	0.40	0.60	0.75	0.85	0.95		
Volume Chg/1,000 Gallons								
Residential								
-	6,000	1.30	1.47	1.71	1.90	2.03	2.15	
6,001	12,000	2.59	2.93	3.40	3.77	4.03	4.27	
12,001	30,000	3.89	4.40	5.10	5.66	6.06	6.42	
30,001	Above	6.25	7.06	8.19	9.09	9.73	10.31	
Non-Residential/School								
-	40,000	\$ 3.30	\$ 3.73	\$ 4.29	\$ 4.72	\$ 4.91	\$ 5.06	
40,001	100,000	5.28	5.97	6.87	7.56	7.86	8.10	
100,001	Above	6.86	7.75	8.91	9.80	10.19	10.50	
Irrigation								
-	80,000	4.95	5.59	6.43	7.07	7.35	7.57	
80,001	Above	5.69	6.43	7.39	8.13	8.46	8.71	
Reclaimed								
All usage per 1,000 gallons		1.65	1.86	2.14	2.35	2.44	2.51	

TABLE IV-2

CITY OF GOODYEAR WASTEWATER RATES: ALTERNATIVE 1									
SCENARIO: 2015 05 25 - WPC - Phase In									
	Current	Effective Jan-16	Effective Jan-17	Effective Jan-18	Effective Jan-19	Effective Jan-20			
Base Charge – Per Month									
3/4"	\$ 21.12	\$ 21.75	\$ 22.40	\$ 22.85	\$ 23.31	\$ 23.78			
1 "	32.41	33.38	34.38	35.07	35.77	36.49			
1 1/2"	39.94	41.14	42.37	43.22	44.08	44.96			
2"	77.58	79.91	82.31	83.96	85.64	87.35			
Volume Chg/1,000 Gallons									
All Classes	5.78	5.95	6.13	6.25	6.38	6.51			

TABLE IV-3

CITY OF GOODYEAR WATER AND WASTEWATER RESIDENTIAL RATE PLAN IMPACT: ALTERNATIVE 1									
SCENARIO: 2015 05 25 - WPC - Phase In									
	Current	Effective Jan-16	Effective Jan-17	Effective Jan-18	Effective Jan-19	Effective Jan-20			
Residential – 3/4"									
5,000 Gallons Water	\$ 17.74	\$ 22.05	\$ 26.28	\$ 29.60	\$ 31.89	\$ 34.04			
5,000 Gallons Wastewater	50.02	51.50	53.05	54.10	55.21	56.33			
Total	67.76	73.55	79.33	83.70	87.10	90.37			
Increase	5.79	5.78	4.37	3.40	3.27				
7,000 Gallons Water									
5,000 Gallons Wastewater	\$ 21.63	\$ 27.25	\$ 32.59	\$ 36.77	\$ 39.65	\$ 42.36			
Water Charge	50.02	51.50	53.05	54.10	55.21	56.33			
Total	71.65	78.75	85.64	90.87	94.86	98.69			
Increase	7.10	6.89	5.23	3.99	3.83				
* Non-Residential – 2"									
25,000 Gallons Water	\$ 123.17	\$ 149.21	\$ 175.56	\$ 195.92	\$ 207.31	\$ 217.36			
20,000 Gallons Wastewater	193.18	198.91	204.91	208.96	213.24	217.55			
Total	316.35	348.12	380.47	404.88	420.55	434.91			
Increase	31.77	32.35	24.41	15.67	14.36				
50,000 Gallons Water									
40,000 Gallons Wastewater	\$ 225.47	\$ 274.86	\$ 323.61	\$ 361.07	\$ 380.81	\$ 398.01			
Water Charge	308.78	317.91	327.51	333.96	340.84	347.75			
Total	534.25	592.77	651.12	695.03	721.65	745.76			
Increase	58.52	58.35	43.91	26.62	24.11				
	11.0%	9.8%	6.7%	3.8%	3.3%				
* Non-Residential WW accounts are billed on 80% of Water consumption									

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Input Area - Rate Calculator Scenario: 2015 05 25 - WPC - Phase In											
Usage Charge	\$ 6,000	16.3	1.84	2.12	2.33	2.42	2.49	2.54	2.59	2.64	2.69
Usage Charge	\$ 12,000	3.24	3.66	4.21	4.63	4.82	4.96	5.06	5.16	5.26	5.37
Usage Charge	\$ 30,000	4.87	5.50	6.33	7.24	7.46	7.61	7.76	7.92	8.08	8.24
Usage Charge	Above	7.81	8.83	10.15	11.17	11.62	11.97	12.21	12.45	12.70	12.95
Multi-Family											
COS - Base Charge	\$ 4,27	\$ 3.30	\$ 3.88	\$ 4.18	\$ 4.36	\$ 4.65	\$ 4.84	\$ 4.76	\$ 4.69	\$ 4.64	\$ 4.57
COS - Usage Charge		11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63
Base Charge	5.8*	3.4*	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.63
Base Charge	1*	1.1*	15.54	17.56	20.19	22.21	23.10	23.79	24.27	24.76	25.26
Base Charge	1 1/2*	2*	25.12	28.39	32.65	35.92	37.36	38.48	39.25	40.04	41.66
Base Charge	2*	40.67	45.86	52.85	58.14	60.47	62.28	63.53	64.80	66.10	67.42
Base Charge	3*	77.67	87.77	100.94	111.03	115.47	118.93	121.31	123.74	128.73	131.30
Base Charge	4*	126.65	143.11	164.58	181.04	188.28	193.93	197.81	201.77	205.81	209.83
Base Charge	6*	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39
Base Charge	8*	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39
Usage Charge	-	40,000	6,20	5.28	6,20	7.13	7.84	8.15	8.39	8.56	8.73
Usage Charge	40,001	100,000	6.86	6.20	7.13	7.84	8.15	8.39	8.56	8.73	8.90
Usage Charge	Above	100,001									
Commercial											
COS - Base Charge	\$ 4.27	\$ 3.55	\$ 4.16	\$ 4.49	\$ 4.97	\$ 5.35	\$ 5.95	\$ 6.18	\$ 6.09	\$ 6.26	\$ 6.44
COS - Usage Charge		11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63
Base Charge	5.8*	3.4*	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.63
Base Charge	1*	1.1*	15.54	17.56	20.19	22.21	23.10	23.79	24.27	24.76	25.26
Base Charge	1 1/2*	2*	25.12	28.39	32.65	35.92	37.36	38.48	39.25	40.04	41.66
Base Charge	2*	40.67	45.86	52.85	58.14	60.47	62.28	63.53	64.80	66.10	67.42
Base Charge	3*	77.67	87.77	100.94	111.03	115.47	118.93	121.31	123.74	128.73	131.30
Base Charge	4*	126.65	143.11	164.58	181.04	188.28	193.93	197.81	201.77	205.81	209.83
Base Charge	6*	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39
Base Charge	8*	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39
Usage Charge	-	40,000	3.73	4.29	4.72	4.91	5.06	5.16	5.26	5.37	5.48
Usage Charge	40,001	100,000	5.28	5.97	6.87	7.56	7.86	8.10	8.26	8.43	8.59
Usage Charge	Above	100,001	6.86	7.75	8.91	9.80	10.19	10.50	10.71	11.14	11.36
Church											
COS - Base Charge	\$ 4.27	\$ 3.71	\$ 4.36	\$ 4.70	\$ 4.97	\$ 5.35	\$ 5.95	\$ 6.18	\$ 6.09	\$ 6.26	\$ 6.44
COS - Usage Charge		11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63
Base Charge	5.8*	3.4*	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.63
Base Charge	1*	1.1*	15.54	17.56	20.19	22.21	23.10	23.79	24.27	24.76	25.26
Base Charge	1 1/2*	2*	25.12	28.39	32.65	35.92	37.36	38.48	39.25	40.04	41.66
Base Charge	2*	40.67	45.86	52.85	58.14	60.47	62.28	63.53	64.80	66.10	67.42
Base Charge	3*	77.67	87.77	100.94	111.03	115.47	118.93	121.31	123.74	128.73	131.30
Base Charge	4*	126.65	143.11	164.58	181.04	188.28	193.93	197.81	201.77	205.81	209.83
Base Charge	6*	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39
Base Charge	8*	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39
Usage Charge	-	40,000	3.73	4.29	4.72	4.91	5.06	5.16	5.26	5.37	5.48
Usage Charge	40,001	100,000	5.28	5.97	6.87	7.56	7.86	8.10	8.26	8.43	8.59
Usage Charge	Above	100,001	6.86	7.75	8.91	9.80	10.19	10.50	10.71	11.14	11.36

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Input Area – Rate Calculator Scenario: 2015 05 25 - WPC - Phase In											
Industrial											
COS – Base Charge	\$	4.27	\$	4.97	\$	5.35	\$	5.95	\$	6.18	\$
COS – Usage Charge	\$	4.80	\$	5.64	\$	6.08	\$	6.76	\$	6.93	\$
Base Charge	5/8"	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63
Base Charge	3/4"	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63
Base Charge	1"	15.54	17.56	20.19	22.21	23.10	23.70	24.27	25.26	26.29	27.57
Base Charge	1 1/2"	25.12	32.65	35.92	37.36	38.48	39.25	40.04	40.84	41.66	42.49
Base Charge	2"	45.96	52.65	59.14	60.47	62.28	63.53	64.80	66.10	67.42	68.77
Base Charge	3"	67.77	100.94	111.03	115.47	118.89	121.31	123.74	126.21	128.73	131.30
Base Charge	4"	128.65	143.11	164.58	181.04	188.28	193.93	197.81	201.77	205.81	214.13
Base Charge	6"	27.61	31.25	34.59	35.92	36.65	37.33	37.54	38.92	39.58	40.36
Base Charge	8"	240.36	240.36	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39
Usage Charge	-	40,000	3.30	3.73	4.29	4.72	4.91	5.06	5.16	5.26	5.37
Usage Charge	40,001	100,000	5.28	5.97	6.87	7.56	8.10	8.43	8.60	8.77	8.95
Usage Charge	Above	100,001	6.86	7.75	8.91	9.80	10.19	10.50	10.71	11.14	11.59
Hydrant											
COS – Base Charge	\$	4.27	\$	4.97	\$	5.35	\$	5.95	\$	6.18	\$
COS – Usage Charge	\$	9.61	\$	11.30	\$	12.18	\$	13.55	\$	14.10	\$
Base Charge	5/8"	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63
Base Charge	3/4"	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63
Base Charge	1"	15.54	17.56	20.19	22.21	23.10	23.70	24.27	25.26	26.29	27.57
Base Charge	1 1/2"	25.12	32.65	35.92	37.36	38.48	39.25	40.04	40.84	41.66	42.49
Base Charge	2"	45.96	52.65	58.14	60.47	62.28	63.53	64.80	66.10	67.42	68.77
Base Charge	3"	77.67	100.94	111.03	115.47	118.89	121.31	123.74	126.21	128.73	131.30
Base Charge	4"	126.65	143.11	164.58	181.04	188.28	193.93	197.81	201.77	205.81	214.13
Base Charge	6"	240.36	240.36	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39
Base Charge	8"	27.61	31.25	34.59	35.92	36.65	37.33	375.41	382.92	390.58	398.39
Usage Charge	-	40,000	3.30	3.73	4.29	4.72	4.91	5.06	5.16	5.26	5.37
Usage Charge	40,001	100,000	5.28	5.97	6.87	7.56	8.10	8.43	8.60	8.77	8.95
Usage Charge	Above	100,001	6.86	7.75	8.91	9.80	10.19	10.50	10.71	11.14	11.59
Institutional											
COS – Base Charge	\$	4.27	\$	4.97	\$	5.35	\$	5.95	\$	6.18	\$
COS – Usage Charge	\$	6.90	\$	8.11	\$	8.74	\$	9.73	\$	10.12	\$
Base Charge	5/8"	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63
Base Charge	3/4"	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63
Base Charge	1"	15.54	17.56	20.19	22.21	23.10	23.70	24.27	25.26	26.29	27.57
Base Charge	1 1/2"	25.12	32.65	35.92	37.36	38.48	39.25	40.04	40.84	41.66	42.49
Base Charge	2"	45.96	52.65	58.14	60.47	62.28	63.53	64.80	66.10	67.42	68.77
Base Charge	3"	87.77	100.94	111.03	115.47	118.89	121.31	123.74	126.21	128.73	131.30
Base Charge	4"	143.11	164.58	181.04	188.28	193.93	197.81	201.77	205.81	214.13	220.93
Base Charge	6"	240.36	240.36	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39
Base Charge	8"	27.61	31.25	34.59	35.92	36.65	37.33	375.41	382.92	390.58	398.39
Usage Charge	-	40,000	3.30	3.73	4.29	4.72	4.91	5.06	5.16	5.26	5.37
Usage Charge	40,001	100,000	5.28	5.97	6.87	7.56	8.10	8.43	8.60	8.77	8.95
Usage Charge	Above	100,001	6.86	7.75	8.91	9.80	10.19	10.50	10.71	11.14	11.59

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Input Area - Rate Calculator Scenario: 2015 05 25 - WPC - Phase In											
Schools											
COS - Base Charge	\$	4.27	\$	4.97	\$	5.35	\$	5.95	\$	6.18	\$
COS - Usage Charge		5.52		5.95		6.62		6.89		6.78	
Base Charge	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63	19.00
Base Charge	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63	19.00
Base Charge	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63	19.00
Base Charge	15.54	17.56	20.19	22.21	23.10	23.79	24.27	24.76	25.26	25.77	26.29
Base Charge	15.54	17.56	20.19	22.21	23.10	23.79	24.27	24.76	25.26	25.77	26.29
Base Charge	25.12	28.39	32.65	35.92	37.36	38.48	39.25	40.04	40.84	41.66	42.49
Base Charge	25.12	28.39	32.65	35.92	37.36	38.48	39.25	40.04	40.84	41.66	42.49
Base Charge	45.96	52.85	59.14	65.47	60.47	62.28	63.53	64.80	66.10	67.42	68.77
Base Charge	45.96	52.85	59.14	65.47	60.47	62.28	63.53	64.80	66.10	67.42	68.77
Base Charge	67.77	77.67	100.94	111.03	115.47	118.85	121.31	123.74	126.21	128.73	131.30
Base Charge	67.77	77.67	100.94	111.03	115.47	118.85	121.31	123.74	126.21	128.73	131.30
Base Charge	128.65	143.11	164.58	181.04	188.28	193.95	197.81	201.77	205.81	209.83	214.13
Base Charge	128.65	143.11	164.58	181.04	188.28	193.95	197.81	201.77	205.81	209.83	214.13
Base Charge	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39	406.36
Base Charge	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39	406.36
Usage Charge	-	40,000	3,73	4.29	4.72	4.91	5.06	5.16	5.26	5.37	5.48
Usage Charge	40,001	100,000	5.28	5.97	6.87	7.56	8.10	8.43	8.60	8.77	8.95
Usage Charge	100,001	Above	6.86	7.75	8.91	9.80	10.19	10.50	10.71	11.14	11.59
Irrigation	25% > Inside										
COS - Base Charge	\$	4.27	\$	4.97	\$	5.35	\$	5.95	\$	6.18	\$
COS - Usage Charge		5.52		6.92		7.46		8.30		8.63	
Base Charge	11.24	11.24	15.88	18.41	20.44	21.86	23.18	24.10	24.83	25.33	25.84
Base Charge	11.24	11.24	15.88	18.41	20.44	21.86	23.18	24.10	24.83	25.33	25.84
Rate Resolution	15.44	15.44	15.88	18.41	20.44	21.86	23.18	24.10	24.83	25.33	25.84
Rate Resolution	15.44	15.44	15.88	18.41	20.44	21.86	23.18	24.10	24.83	25.33	25.84
Base Charge	21.35	25.12	25.46	28.26	30.24	32.05	33.34	34.34	35.03	35.73	36.44
Base Charge	21.35	25.12	25.46	28.26	30.24	32.05	33.34	34.34	35.03	35.73	36.44
Base Charge	34.51	41.16	45.69	48.89	51.83	53.90	55.51	56.63	57.51	58.91	59.51
Base Charge	34.51	41.16	45.69	48.89	51.83	53.90	55.51	56.63	57.51	58.91	59.51
Base Charge	55.88	60.67	66.64	73.95	79.14	83.89	87.24	89.85	91.65	93.49	95.36
Base Charge	55.88	60.67	66.64	73.95	79.14	83.89	87.24	89.85	91.65	93.49	95.36
Base Charge	97.09	106.70	127.76	141.26	151.15	160.23	166.64	171.64	175.08	178.95	182.15
Base Charge	158.31	173.89	178.69	207.51	230.34	246.46	261.25	271.95	279.95	286.45	291.16
Base Charge	300.45	320.20	340.36	393.51	427.16	467.76	495.93	515.66	531.14	541.76	552.60
Base Charge	300.45	320.20	340.36	393.51	427.16	467.76	495.93	515.66	531.14	541.76	552.60
Usage Charge	-	80,000	4.95	5.59	6.43	7.07	7.35	7.57	7.72	7.87	8.03
Usage Charge	80,001	Above	5.69	6.43	7.39	8.13	8.46	8.71	8.88	9.06	9.19
Usage Charge	na	na	-	-	-	-	-	-	-	-	8.35
Usage Charge	na	na	-	-	-	-	-	-	-	-	9.61
Reclaimed											
COS - Base Charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$
COS - Usage Charge											
Base Charge	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63	19.00
Base Charge	11.24	12.70	14.61	16.07	16.71	17.21	17.55	17.90	18.26	18.63	19.00
Base Charge	15.54	17.56	20.19	22.21	23.10	23.79	24.27	24.76	25.26	25.77	26.29
Base Charge	25.12	28.39	32.65	35.92	37.36	38.48	39.25	40.04	40.84	41.66	42.49
Base Charge	45.96	52.85	59.14	65.47	60.47	62.28	63.53	64.80	66.10	67.42	68.77
Base Charge	45.96	52.85	59.14	65.47	60.47	62.28	63.53	64.80	66.10	67.42	68.77
Base Charge	87.77	100.94	104.84	111.03	115.47	118.85	121.31	123.74	126.21	128.73	131.30
Base Charge	87.77	100.94	104.84	111.03	115.47	118.85	121.31	123.74	126.21	128.73	131.30
Base Charge	126.65	143.11	164.58	181.04	188.28	193.95	197.81	201.77	205.81	209.83	214.13
Base Charge	126.65	143.11	164.58	181.04	188.28	193.95	197.81	201.77	205.81	209.83	214.13
Base Charge	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39	406.36
Base Charge	240.36	271.61	312.35	343.59	357.33	368.05	375.41	382.92	390.58	398.39	406.36
Usage Charge	-	40,000	1.65	1.86	2.14	2.35	2.44	2.51	2.56	2.61	2.76
Usage Charge	40,001	100,000	1.65	1.86	2.14	2.35	2.44	2.51	2.56	2.61	2.76
Usage Charge	100,001	Above	1.65	1.86	2.14	2.35	2.44	2.51	2.56	2.61	2.76

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Input Area – Rate Calculator Scenario: – 2015 05 25 - WPC - Phase In											
Wastewater Rates											
Retail Month of Adjustment (July=1)		7	7	7	7	7	7	7	7	7	7
Industrial Month of Adjustment (July=1)		7	7	7	7	7	7	7	7	7	7
Annual Adjustment											
Retail											
WW1 Residential City	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW2 Residential County	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW3 Multi-Family	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW4 Commercial	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW5 Church	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW6 Industrial	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW7 Effluent	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW8 Institutional	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW9 School	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW10 Perryville Prison	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
WW11 Other	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Industrial											
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Customer	0.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Retail											
WW1 Residential-City											
COS – Usage Charge	\$ 8.01	\$ 9.06	\$ 8.88	\$ 9.17	\$ 9.58	\$ 9.33	\$ 9.11	\$ 9.10	\$ 9.54	\$ 9.50	
Base Charge	21.12	21.75	22.40	22.85	23.31	23.78	24.26	24.75	25.25	25.76	26.28
WW2 Residential-County											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	26.40	27.19	28.01	28.57	29.14	29.72	30.31	30.92	31.54	32.17	32.81
WW3 Multi-Family											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	34.41	41.14	42.37	43.22	44.96	45.86	46.78	47.72	48.67	49.64	50.61
WW4 Commercial											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	41.73	47.91	52.31	58.64	67.35	85.64	89.10	93.70	94.35	96.44	98.53
WW5 Church											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	41.73	47.91	52.31	58.64	67.35	85.64	89.10	93.70	94.35	96.44	98.53
WW6 Industrial											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	41.73	47.91	52.31	58.64	67.35	85.64	89.10	93.70	94.35	96.44	98.53
WW7 Effluent											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	41.73	47.91	52.31	58.64	67.35	85.64	89.10	93.70	94.35	96.44	98.53
WW8 Institutional											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	41.73	47.91	52.31	58.64	67.35	85.64	89.10	93.70	94.35	96.44	98.53
WW9 School											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	41.73	47.91	52.31	58.64	67.35	85.64	89.10	93.70	94.35	96.44	98.53
WW10 Perryville Prison											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	41.73	47.91	52.31	58.64	67.35	85.64	89.10	93.70	94.35	96.44	98.53
WW11 Other											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	41.73	47.91	52.31	58.64	67.35	85.64	89.10	93.70	94.35	96.44	98.53
Usage Charge	-	All	5.78	6.13	6.25	6.38	6.51	6.64	6.77	6.91	7.05
WW2 Residential-County											
COS – Usage Charge	\$ 8.18	\$ 9.23	\$ 9.04	\$ 9.34	\$ 9.74	\$ 9.48	\$ 9.26	\$ 9.25	\$ 9.68	\$ 9.65	
Base Charge	40.51	47.91	52.31	58.64	67.35	85.64	89.10	93.70	94.35	96.44	98.53

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Input Area - Rate Calculator Scenario: 2015 05 25 - WPC - Phase In											
1 1/2"	\$ 51.43	52.87	54.03	55.11	56.21	57.33	58.48	59.65	60.84	62.05	62.05
2"	\$ 99.89	102.89	104.95	107.05	109.19	111.37	113.60	115.87	118.19	120.55	120.55
3"	\$ 144.03	152.80	155.86	158.98	162.16	165.42	168.71	172.08	175.52	179.03	179.03
4"	\$ 191.08	202.71	206.76	210.90	215.12	219.42	223.81	228.29	232.86	237.35	237.35
6"	\$ 487.58	502.21	512.25	522.50	532.95	543.61	554.48	565.57	576.88	588.42	588.42
8"	\$ 487.58	502.21	512.25	522.50	532.95	543.61	554.48	565.57	576.88	588.42	588.42
Usage Charge	-	All	7.45	7.67	7.82	7.98	8.14	8.30	8.47	8.64	8.81
WW3 Multi Family											
COS - Usage Charge	\$ 6.72	\$ 7.80	\$ 7.64	\$ 7.96	\$ 8.39	\$ 8.17	\$ 7.97	\$ 7.98	\$ 8.44	\$ 8.43	\$ 8.43
Base Charge	58"	21.12	21.75	22.40	22.85	23.31	23.78	24.26	24.75	25.25	25.76
1"	34"	21.12	21.75	22.40	22.85	23.31	23.78	24.26	24.75	25.25	25.76
1 1/2"	32.41	33.38	34.38	35.07	35.77	36.49	37.22	37.96	38.72	39.49	40.28
2"	41.14	42.37	43.22	44.08	44.96	45.86	46.78	47.72	48.67	49.64	49.64
3"	77.58	82.31	83.96	85.64	87.35	89.10	90.88	92.70	94.55	96.44	96.44
4"	115.22	122.24	124.68	127.17	129.71	132.30	134.95	137.65	140.40	143.21	143.21
6"	152.86	162.17	165.41	168.72	172.09	175.53	179.04	182.62	186.27	190.45	190.45
8"	390.06	401.76	409.80	418.00	426.36	434.89	443.59	452.46	461.51	470.74	470.74
Usage Charge	-	All	5.78	5.95	6.13	6.25	6.38	6.51	6.64	6.77	7.91
WW4 Commercial											
COS - Usage Charge	\$ 6.77	\$ 7.84	\$ 7.68	\$ 8.01	\$ 8.44	\$ 8.21	\$ 8.01	\$ 8.02	\$ 8.48	\$ 8.47	\$ 8.47
Base Charge	58"	21.12	21.75	22.40	22.85	23.31	23.78	24.26	24.75	25.25	25.76
1"	34"	21.12	21.75	22.40	22.85	23.31	23.78	24.26	24.75	25.25	25.76
1 1/2"	32.41	33.38	34.38	35.07	35.77	36.49	37.22	37.96	38.72	39.49	40.28
2"	41.14	42.37	43.22	44.08	44.96	45.86	46.78	47.72	48.67	49.64	49.64
3"	77.58	82.31	83.96	85.64	87.35	89.10	90.88	92.70	94.55	96.44	96.44
4"	115.22	122.24	124.68	127.17	129.71	132.30	134.95	137.65	140.40	143.21	143.21
6"	152.86	162.17	165.41	168.72	172.09	175.53	179.04	182.62	186.27	190.45	190.45
8"	390.06	401.76	409.80	418.00	426.36	434.89	443.59	452.46	461.51	470.74	470.74
Usage Charge	-	All	5.78	5.95	6.13	6.25	6.38	6.51	6.64	6.77	7.91
WW5 Church											
COS - Usage Charge	\$ 6.89	\$ 7.96	\$ 7.80	\$ 8.12	\$ 8.55	\$ 8.32	\$ 8.12	\$ 8.12	\$ 8.59	\$ 8.57	\$ 8.57
Base Charge	58"	21.12	21.75	22.40	22.85	23.31	23.78	24.26	24.75	25.25	25.76
1"	34"	21.12	21.75	22.40	22.85	23.31	23.78	24.26	24.75	25.25	25.76
1 1/2"	32.41	33.38	34.38	35.07	35.77	36.49	37.22	37.96	38.72	39.49	40.28
2"	41.14	42.37	43.22	44.08	44.96	45.86	46.78	47.72	48.67	49.64	49.64
3"	77.58	79.91	82.31	83.96	85.64	87.35	89.10	90.88	92.70	94.55	96.44
4"	115.22	118.68	122.24	124.68	127.17	129.71	132.30	134.95	137.65	140.40	143.21
6"	152.86	162.17	165.41	168.72	172.09	175.53	179.04	182.62	186.27	190.45	190.45
8"	390.06	398.70	401.76	409.80	418.00	426.36	434.89	443.59	452.46	461.51	470.74
Usage Charge	-	All	5.78	5.95	6.13	6.25	6.38	6.51	6.64	6.77	7.91
WW6 Industrial											
COS - Usage Charge	\$ 6.66	\$ 7.74	\$ 7.59	\$ 7.91	\$ 8.34	\$ 8.12	\$ 7.92	\$ 7.93	\$ 8.40	\$ 8.39	\$ 8.39
Base Charge	58"	21.12	21.75	22.40	22.85	23.31	23.78	24.26	24.75	25.25	25.76
1"	34"	21.12	21.75	22.40	22.85	23.31	23.78	24.26	24.75	25.25	25.76
1 1/2"	32.41	33.38	34.38	35.07	35.77	36.49	37.22	37.96	38.72	39.49	40.28
2"	41.14	42.37	43.22	44.08	44.96	45.86	46.78	47.72	48.67	49.64	49.64
3"	77.58	79.91	82.31	83.96	85.64	87.35	89.10	90.88	92.70	94.55	96.44
4"	115.22	118.68	122.24	124.68	127.17	129.71	132.30	134.95	137.65	140.40	143.21
6"	152.86	162.17	165.41	168.72	172.09	175.53	179.04	182.62	186.27	190.45	190.45
8"	390.06	398.70	401.76	409.80	418.00	426.36	434.89	443.59	452.46	461.51	470.74
Usage Charge	-	All	5.78	5.95	6.13	6.25	6.38	6.51	6.64	6.77	7.91

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Input Area - Rate Calculator Scenario: 2015 05 25 - WPC - Phase In											
WW7	COS - Usage Charge	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.61	\$ 7.69	\$ 7.54	\$ 7.86	\$ 8.29	\$ 8.07	\$ 7.87
Base Charge	5'8"	152.86	157.45	162.17	165.41	168.72	172.09	175.53	179.04	182.62	186.27
Usage Charge	All	378.70	390.06	401.76	409.80	418.00	426.36	434.89	443.59	452.46	461.51
WW7	Effluent (Reclaimed Water)	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.61	\$ 7.69	\$ 7.54	\$ 7.86	\$ 8.29	\$ 8.07	\$ 7.87
Base Charge	5'8"	21.12	21.75	22.40	22.95	23.31	23.78	24.26	24.75	25.25	25.76
Usage Charge	All	32.41	33.38	34.38	35.07	35.77	36.49	37.22	37.95	38.72	40.28
WW8	Institutional	\$ 1.65	\$ 1.70	\$ 1.75	\$ 1.79	\$ 1.83	\$ 1.87	\$ 1.91	\$ 1.95	\$ 1.99	\$ 2.03
Base Charge	5'8"	21.12	21.75	22.40	22.95	23.31	23.78	24.26	24.75	25.25	25.76
Usage Charge	All	378.70	390.06	401.76	409.80	418.00	426.36	434.89	443.59	452.46	461.51
WW8	School	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.61	\$ 7.69	\$ 7.54	\$ 7.86	\$ 8.29	\$ 8.07	\$ 7.87
Base Charge	5'8"	21.12	21.75	22.40	22.95	23.31	23.78	24.26	24.75	25.25	25.76
Usage Charge	All	378.70	390.06	401.76	409.80	418.00	426.36	434.89	443.59	452.46	461.51
WW9	Parcels	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.61	\$ 7.69	\$ 7.54	\$ 7.86	\$ 8.29	\$ 8.07	\$ 7.87
Base Charge	5'8"	21.12	21.75	22.40	22.95	23.31	23.78	24.26	24.75	25.25	25.76
Usage Charge	All	378.70	390.06	401.76	409.80	418.00	426.36	434.89	443.59	452.46	461.51
WW10	Parcels/Prison	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.61	\$ 7.69	\$ 7.54	\$ 7.86	\$ 8.29	\$ 8.07	\$ 7.87
Base Charge	5'8"	-	-	-	-	-	-	-	-	-	-
Usage Charge	All	378.70	390.06	401.76	409.80	418.00	426.36	434.89	443.59	452.46	461.51

CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Input Area - Rate Calculator											
Scenario: 2015 05 25 - WPC - Phase In											
Customer	Comm Vol. Rate	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
1 - Based on COS	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19
2 - Based on Current Rate	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ -
Usage Charge	1	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
Industrial Usage Charge											
Customer	Comm Vol. Rate	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
1 - Based on COS	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19
2 - Based on Current Rate	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ -
Usage Charge	2	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
Customer											
Customer	Comm Vol. Rate	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
1 - Based on COS	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19
2 - Based on Current Rate	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ -
Usage Charge	1	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
Customer											
Customer	Comm Vol. Rate	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
1 - Based on COS	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19
2 - Based on Current Rate	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ -
Usage Charge	1	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
Customer											
Customer	Comm Vol. Rate	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
1 - Based on COS	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19
2 - Based on Current Rate	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ -
Usage Charge	1	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
Customer											
Customer	Comm Vol. Rate	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
1 - Based on COS	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19
2 - Based on Current Rate	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ -
Usage Charge	1	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
Customer											
Customer	Comm Vol. Rate	\$ 5.78	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05
1 - Based on COS	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19
2 - Based on Current Rate	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ -
Usage Charge	1	-	\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05

		CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL																					
		Current		2016		2017		2018		2019		2020		2021		2022		2023		2024		2025	
Input Area – Rate Calculator Scenario: 2015 05 25 - WPC - Phase In																							
Customer		\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19												
1 - Based on COS																							
2 - Based on Current Rate																							
Usage Charge	2																						
Customer		\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19												
1 - Based on COS																							
2 - Based on Current Rate																							
Usage Charge	1																						
Customer		\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19												
1 - Based on COS																							
2 - Based on Current Rate																							
Usage Charge	2																						
Customer		\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19												
1 - Based on COS																							
2 - Based on Current Rate																							
Usage Charge	2																						
Customer		\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19												
1 - Based on COS																							
2 - Based on Current Rate																							
Usage Charge	2																						
Customer		\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19												
1 - Based on COS																							
2 - Based on Current Rate																							
Usage Charge	2																						
Customer		\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19												
1 - Based on COS																							
2 - Based on Current Rate																							
Usage Charge	1																						
Customer		\$ 5.95	\$ 6.13	\$ 6.25	\$ 6.38	\$ 6.51	\$ 6.64	\$ 6.77	\$ 6.91	\$ 7.05	\$ 7.19												
1 - Based on COS																							
2 - Based on Current Rate																							
Usage Charge	1																						

		CITY OF GOODYEAR WATER/WASTEWATER COST OF SERVICE MODEL										
		Current	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Input Area – Rate Calculator Scenario: 2015 05 25 - WPC - Phase In												
Summary of Results – Rate Calculator												
Revenues Less Revenue Requirement												
Water	(503,475)	(533,888)	236,443	91,955	82,459	1,241,382	1,354,629	1,400,693	1,469,278	1,537,077	(612,580)	
Wastewater	1,632,887	413,552	785,025	600,218	220,439	1,024,723	1,836,682	2,292,658	1,875,077	2,422,221		
Total	1,149,411	(120,336)	1,024,468	508,263	302,898	2,268,105	3,197,511	3,693,351	3,344,355	1,810,141	3.5%	
Days of Fund Balance												
Water	47	22	26	21	21	46	69	90	109	92	92	
Wastewater	521	440	450	433	394	368	405	449	477	518	518	
Debt Coverage												
Water	1.20	1.23	1.37	1.32	1.37	1.58	1.61	1.60	1.61	1.25		
Wastewater	1.75	1.69	1.79	1.79	1.82	2.59	2.96	3.08	2.61	2.73		

Exhibit IV-4 presents pages from the rate model that summarize both the rate recommendations and forecast net revenues under this alternative by year over the forecast period.

While this study presents a forecast of rates over the next decade, it is recommended that the City monitor actual growth in accounts and consumption, and update its forecasts annually due to the dynamic nature of growth in the City, and the rapid rate of change within the utility and the City. Periodic reviews will enable the City to assess the need for adjustments to the long-term rate plan.

Notes on Rate Recommendation

The forecast and recommendations presented in this study represent a combination of the best information available from the City and the project team's expertise. However, this forecast relies in part on assumptions about future events and events beyond the control of the project team (such as account growth rates within the City). The forecast and recommendations contained in this study may be subject to revision if any of the following events occurs:

- Actual growth in accounts and consumed volumes is less than (or significantly greater than) forecast
- Capital improvement plan funding costs increase significantly due to the rising cost of materials or other factors
- An unforeseen event impacts the City, such as an extended recession, natural catastrophe or terrorist attack
- Increases or decreases in interest rates, coverage requirements or reserve requirements for municipal long-term debt.
- City budget levels or priorities change significantly from those forecast in this study

It should be noted that none of these events are foreseen by the project team or by the City at this time.

If any of these events occur the City may be compelled to consider further adjustments to its water and wastewater rates.

Section V

SECTION V

Non-Rate Fees and Services Cost Analysis



Economists.com also has been engaged by the City of Goodyear, AZ ("City") to review its schedule of Non-Rate Fees and Services related to its water and wastewater utilities. As is common for all utilities, the City maintains a schedule of fees and charges for services that are offered in addition to basic monthly water and wastewater service. Unlike utility rates, which are charged to all active ratepayers, these fees are only charged to those customers who specifically request the associated service or who are violating the utility's codes. These fees are generally known as Non-Rate Fees and Services.

The City's Non-Rate Fees have not been reviewed or adjusted over the past 7 years. The City seeks to analyze the cost it incurs in providing each of these services to the associated ratepayer as well as an analysis of what other cities charge for similar fees and services. This will form the basis of the fee recommended to be charged for each service.

In order to be properly calculated and implemented, each category of Non-Rate Fees and Services must have its costs calculated according to a basic, generally-accepted methodology. This methodology has been closely followed during the course of this study. The non-rate revenue calculation model contained in Appendix B of this report presents the cost calculation methodology in detail.

Cost Calculation Methodology

In order to develop a cost estimate for each of the categories of Non-Rate Fees and Services, the Project Team utilized the following approach:

1. The Project Team conducted a series of meetings with City personnel to assess the types of costs incurred in providing these services. City field personnel were interviewed and contributed a significant amount of raw data and analysis to assist the Project Team. City staff expended considerable time and effort fulfilling the requests of the Project Team. All requests were complied with in an efficient, professional manner. The Project Team owes a debt of gratitude to the professionalism and diligence of City staff for their assistance in this endeavor.

2. The Project Team divided the data and analysis for each service into four categories: Labor, Materials, Vehicle Costs, and Other. Labor includes the time devoted by clerical, field and administrative personnel in completing the associated service. Materials include the specific items required by each service. Vehicles include the capital and operating costs of City vehicles required for the service. Other costs include specific items not assigned to any of the other categories.

3. Each cost was reviewed, calculated and incorporated into the non-rate fees and services cost calculation model presented in Appendix A. The total cost for each service represents the sum of the individual category costs.

Current Non-Rate Fees and Services

Table V-1 and Table V-2 below presents the City's current schedule for each category of Non-Rate Fees and Services. The "Z" Fee Coded services are billed at time and materials (TMO).

Table V-1

CITY OF GOODYEAR NON-RATE FEES AND SERVICES CALCULATION MODEL					
Fee Code	Description	Current Fee	Fee Code	Description	Current Fee
RC	Late Payment Fee	1.50%	ZA	1" Meter Box Replace	\$ 574.75
	Non-Sufficient Funds Fee	\$ 35.00	ZB	RPL #2 Conc. Mtr Box	330.94
SD	Security Deposit - Resid	200.00	ZD	Basic 2 Tech	324.36
	Security Deposit - Non Resid	250.00	ZE	MXU Replacement	376.88
CC	Cross Connection-Backflow	9.00	ZF	Meter Test	204.38
CF	Activation Fee - Same Day	50.00	ZG	1" Ball Valve Replace	302.06
CN	Activation Fee - Next Day	50.00	ZH	Damaged Hydrant Meter	1,341.15
DN	Disconnect Notice - Water	18.00	ZI	Damaged 6" Register	471.20
RF	Admin Fee (Shut off)	50.00	ZJ	RPLC 2" Meter	1,387.16
TO	Same Day Reinstatement	50.00	ZK	3" Hydrant Meter	1,507.31
WA	Water Audit Fee	54.00	ZL	4" Hydrant Meter	3,115.85
FV	Field Visit	50.00	ZM	6" Hydrant Meter	5,274.90
LH	Hydrant Connection - Install	100.00	ZN	8" Hydrant Meter	8,161.29
MT	Meter Tampering	65.00	Z1	Chg 3/4" to 1" Box	574.75
"Z" Fees		TMO	Z2	Locate Unbury Meter	211.28
			Z3	Replace 1" Meter Dam	465.82
			Z4	Replace 3/4" Meter	432.05
			Z5	Repair Meter Wires	231.09
			Z6	3/4 Meter Box Lid Replacement	241.50
			Z7	1" Meter Box Lid Replacement	278.32
			Z8	Relocate Service Line	453.98
			Z9	Replace Meter Box 3/4"	451.62

Table V-2

CITY OF GOODYEAR NON-RATE FEES AND SERVICES CALCULATION MODEL			
WATER RESOURCES STANDARD LABOR AND EQUIPMENT RATES			
Description	Current Fee Per Hour	Description	Current Fee
Equipment:		Administrative and Labor:	
Dump Truck and Trailer	\$83.00	Utility Tech I	\$ 23.15
Backhoe	31.00	Staff Assist/Billing Staff	100.00
Utility Vehicle with tools	30.00		
Air Compressor with jack Hammer	18.50	Water Loss:	
Vacoon Truck	175.00	Cost of water loss due to damage	\$3.00/1,000 gal
Generator 6 kW (Portable)	13.71		
Tamper	16.41	Bacti Lab Tests:	
2" Trash Pump	16.86	Lab Costs	\$ 20.00
Equipment Trailer	na		
Crew Truck		Material:	
		Material shall be charged at retail prices	Retail

Non-Rate Fees and Services Analysis General Assumptions

Subsequent to meetings with City staff and a full review of the City's data, the Project Team made a series of general assumptions that are applicable to the Non-Rate Fee calculations. All fees for services are calculated as a minimum charge with labor and materials in excess of the minimum being charged at actual City time and expense. Additional assumptions are as follows:

- Personnel were separated by position into the following categories: Clerical/Specialist/Manager; Field/Field Specialist/Manager; and Professional. The hourly cost for these positions includes salaries and benefits based on City of Goodyear FY14 Average Loaded Salary (with Benefits).
- Clerical/Specialist/Manager time charged is rounded to \$34.50 per hour during business hours and \$52.00 after business hours.
- Field/Field Specialist/Manager time charged is rounded to \$37.00 per hour during business hours and \$55.00 after business hours.
- Professional time charged is rounded to \$62.00 per hour during business hours and \$93.00 after business hours.
- Material used to provide the services are priced at retail cost with no City discounts passed through.
- Average miles per trip are calculated differently based on the type of fee:
 - For Non-Rate Fees the average miles per trip are calculated to be 15, based on the size of the City's service territory.
 - When a fee is collected and there is a route involved (ie. Disconnect and Reconnect Fees), the mileage is decreased to 5 miles to reflect a portion of the total miles.

- Gasoline cost for City vehicles is estimated to be \$.40 per mile based on 15,000 miles per year, averaging 10 miles per gallon and an average gas price of \$4.00 a gallon. $((15,000 \text{ miles}/10 \text{ mpg}) * \$4.00)/15000 = \$.40$
- City utility vehicles are assumed to cost an average of \$30,000, have a lifespan of 75,000 miles. Operating costs per mile are calculated to be $(\$30,000/75,000 + 0.10) = \0.50 per mile.

Summary Result and Non-Service Fee Recommendations

Table V-3 shows the Non-Rate and Service Fee categories for which the City currently charges customers and tracks revenue.

TABLE V-3

CITY OF GOODYEAR NON-RATE FEES AND SERVICES CALCULATION MODEL					
Fee Code	Description	Revenue FY 2014	Current Fee		
RC	Late Payment Fee	\$ 100,145		1.50%	
MC	Non-Sufficient Funds Fee	525	\$	35.00	
SD	Miscellaneous Chg	5,228		-	
CC	Security Deposit - Resid	-		200.00	
CF	Security Deposit - Non Resid	-		250.00	
CN	Cross Connection-Backflow	90,784		9.00	
DN	Activation Fee - Same Day	4,350		50.00	
DN	Activation Fee - Next Day	52,200		50.00	
RF	Disconnect Notice - Water	407,178		18.00	
TO	Admin Fee (Shut off)	69,950		50.00	
WA	Same Day Reinstatement	43,900		50.00	
FV	Water Audit Fee	-		54.00	
LH	Field Visit	-		55.00	
LH	Hydrant Connection	600		100.00	
MT	Meter Tampering	2,585		65.00	

Tables V-4 and V-5 present Non-Rate Fees and Services that the City maintains and bills on time and material basis or reflect a deposit which is returned to the customer upon completion of the service. These fees were last updated in 2006. These fees are referred to as "Z" Fees and Water Resources Standard Labor and Equipment Rates. Revenue from these charges are reflected in the City's Damaged Utility account 411-0000-365-01-00.

TABLE V-4

CITY OF GOODYEAR NON-RATE FEES AND SERVICES CALCULATION MODEL		Z - FEES	Current Fee
ZA	1" Meter Box Replace	\$	574.75
ZB	RPL #2 Conc. Mtr Box		330.94
ZD	Basic 2 Tech		324.36
ZE	MXU Replacement		376.88
ZF	Meter Test		204.38
ZG	1" Ball Valve Replace		302.06
ZH	Damaged Hydrant Meter		1,341.15
ZI	Damaged 6" Register		471.20
ZJ	RPLC 2" Meter		1,387.16
ZK	3" Hydrant Meter		1,507.31
ZL	4" Hydrant Meter		3,115.85
ZM	6" Hydrant Meter		5,274.90
ZN	8" Hydrant Meter		8,161.29
Z1	Chg 3/4" to 1" Box		574.75
Z2	Locate Unbury Meter		211.28
Z3	Replace 1" Meter Dam		465.82
Z4	Replace 3/4" Meter		432.05
Z5	Repair Meter Wires		231.09
Z6	3/4 Meter Box Lid Replacement		241.50
Z7	1" Meter Box Lid Replacement		278.32
Z8	Relocate Service Line		453.98
Z9	Replace Meter Box 3/4"		451.62

TABLE V-5

CITY OF GOODYEAR NON-RATE FEES AND SERVICES CALCULATION MODEL		WATER RESOURCES STANDARD LABOR AND EQUIPMENT RATES	
Description	Current Fee Per Hour	Description	Current Fee
Equipment:		Administrative and Labor:	
Dump Truck and Trailer	\$83.00	Utility Tech I	\$ 23.15
Backhoe	31.00	Staff Assist/Billing Staff	100.00
Utility Vehicle with tools	30.00		
Air Compressor with jack Hammer	18.50	Water Loss:	
Vaccoon Truck	175.00	Cost of water loss due to damage	\$3.00/1,000 gal
Generator 6 kW (Portable)	13.71		
Tamper	16.41	Bacti Lab Tests:	
2" Trash Pump		Lab Costs	\$ 20.00
Equipment Trailer	16.86		
Crew Truck	na	Material:	
		Material shall be charged at retail prices	Retail

Table V-6 presents Non-Rate Service Fee comparisons with various Arizona cities. Comparison data is based on information provided by City Staff.

TABLE V-6

CITY OF GOODYEAR NON-RATE FEES AND SERVICES CALCULATION MODEL		FEE:	Non-Rate Fee and Services Comparison								
	Goodyear Current Fee		Avondale	Buckeye	Gilbert	Glendale	Mesa	Peoria	Scottsdale	Surprise	Tempe
Late Payment Fee											
Total	1.50%		1.50%	1.50%	1.50%	1.50%	2% or \$5.00 whichever is greater	1.5% or \$2.00 whichever is greater	\$5.00	1.50%	1.00%
Returned Check Fee											
Total	35.00		25.00	35.00	25.00	29.44	25.00	30.00	25.00	20.00	15.00
Security Deposit Fee											
Residential	200.00	\$175 Living at Property Paid in Full. \$200 Living at Property, Billed in Installments. \$250.00 Not living at property.	\$125.00 Water \$75.00 Sewer \$30.00 Trash	200.00	200.00	Water \$100.00 Sewer - \$50.00 Refuse - \$60.00	225.00	156.00	Water \$58.17 (3/4" meter), \$75.60 (1" meter) Sewer - \$74.34 Trash - \$49.89	50.00	
Cross Connection-Backflow											
Total	9.00										
Activation Fee - Same Day											
Total	50.00		100.00	60.00	\$30.00	24.45	27.00	28.00	29.00	35.00	15.00
Activation Fee - Next Day											
Total	50.00		60.00		15.00						
Disconnect Notice - Water											
Total	18.00		60.00	50.00	25.00	54.98	56.00	50.00	55.00	70.00	15.00
Admin Fee (Shut off)											
Total	50.00										
Same Day Reinstatement											
Total	50.00			\$50.00 after 2:00 pm	75.00		45.00				
Water Audit Fee											
Total	54.00										
Field Visit											
Total	50.00		40.00	50.00	75.00	79.45	45.00	32.00	65.00	45.00	35.00
Hydrant Connection - Install											
Total	100.00	\$1,000 Deposit \$50 Installation		\$1,000 Deposit and Install	\$1,642.38 Deposit and Install	\$1,500 Deposit \$150 Instalation	\$1,000 Deposit				
Meter Tampering											
Total	65.00	100.00	100 + TMO	100.00	79.45	100.00	75.00	100.00	TMO	75.00	

Tables V-7 presents the Project Team's recommended Non-Rate Fees and Service and revenue projections.

TABLE V-7

CITY OF GOODYEAR NON-RATE FEES AND SERVICES CALCULATION MODEL									
Fee Code	Description	Revenue FY 2014	Current Fee	Proposed Fee	Basis for Recommendation	Percent Increase	Forecast Revenue Proposed Fees	Annual Increase	
	Late Payment Fee	\$ 100,145	1.50%	1.50%		0.00%	100,145	-	
RC	Non-Sufficient Funds Fee	525	\$ 35.00	\$ 50.00	\$ 52.25	42.86%	750	225	
MC	Miscellaneous Chg	5,228	-						
SD	Security Deposit - Resid	-	200.00	200.00	183.16	0.00%	-	-	
	Security Deposit - Non Resid	-	250.00	650.00	688.99	160.00%	-	-	
CC	Cross Connection-Backflow	90,784	9.00	9.00	8.63	0.00%	90,784	-	
CF	Activation Fee - Same Day	4,350	50.00	50.00	52.58	0.00%	4,350	-	
CN	Activation Fee - Next Day	52,200	50.00	60.00	61.83	20.00%	62,640	10,440	
DN	Disconnect Notice - Water	407,178	18.00	18.00	18.25	0.00%	407,178	-	
RF	Admin Fee (Shut off)	69,950	50.00	50.00	24.25	0.00%	69,950	-	
TO	Same Day Reinstatement	43,900	50.00	50.00	52.58	0.00%	43,900	-	
WA	Water Audit Fee	-	54.00	75.00	104.38	38.89%	-	-	
FV	Field Visit	-	55.00	85.00	87.50	0.00%	-	-	
LH	Hydrant Connection	600	100.00	150.00	163.25	50.00%	900	300	
MT	Meter Tampering	2,585	65.00	100.00	97.75	53.85%	3,977	1,392	
FY 2014 TOTAL		\$ 777,445					\$ 784,574	\$ 12,357	

With the "Z" Fees and Water Resources Standard Labor and Equipment Rates revenue assigned to the City's damaged utility account, there is not expected to be additional Non-Rate Revenue derived from these fees being updated. It is recommended by the Project Team that "Z" Fees and Standard Labor and Equipment Rates be assigned to Non-Rate Fees and Services as Time and Material charges are incurred to the City to provide these services. It is additionally recommended that the City update Labor and Equipment costs annually.